

# Antonio Giuseppe Sagona (1956-2017)

Ronald T. RIDLEY

Tony Sagona was born in Tripoli, Libya, on 30 April 1956 (this caused problems later after 9/11, when he tried to visit USA for a conference!) to Salvatore Sagona and Maria Camilleri. His mother's family had been shipbuilders in Libya for several generations. His father became an electrician, but was also a brilliant taxidermist (examples of his work hang in Tony's study). Tony was only three when he came with his parents to Melbourne in 1960 on the *Roma*, which they had boarded in Aden. The family settled in the charming seaside suburb of Williamstown. He had two sisters.

Tony received his secondary education at Emmanuel College, Altona. He entered the University of Melbourne in 1974, studying History and Archaeology (both in the History department and Middle Eastern Studies (at that time a separate department). He was my student in History, along with the woman who was to be his wife, colleague and companion, Claudia Smith. I still remember the two of them as standing out in the seminars because of their seriousness and commitment. I could not, however, compete with the allure of my archaeological colleague William Culican. The less committed half of his classes simply could not survive, but the serious and dedicated half was entranced. He was a brilliant lecturer and a riveting raconteur, and very much enjoyed his own stories. He had worked with people like Mortimer Wheeler, and was a close friend of James Mellaart, discoverer of Chatal Huyuk, and later of Dorak Treasure fame. Culican seemed to live half his life on the Orient Express (metaphorically speaking) and half in the Baron Hotel at Aleppo. He told tall stories for which the only parallels I know are in Leonard Woolley's *Dead Towns and Living Men*. When Woolley was denied a permit, for example, accompanied by his murderous foreman Hamoudi, he simply rushed into the high official's office and put a gun to his head—the requisite papers were signed. Students did not realise that Culican's riotous public persona was underpinned by a photographic memory and unrelenting scholarship in far from comfortable conditions. He was seconded by the amazing assembly of eccentric talents in Middle Eastern Studies. Tony's career was set.

Tony studied across three departments: History, Middle Eastern Studies and Fine Arts, and almost without exception obtained first class honours. He was awarded first place in Middle Eastern Studies III and IV and Hebrew III. His first major piece of research was his Honours thesis: *The Development and Expansion of the Early Trans-Caucasian Culture during the Third Millennium BC: The Khirbet Kerak Problem*. An international marker stated that it was of Master's level.

On graduation, he and Claudia married. He was, of course, appointed a tutor by Culican, in which capacity he served until 1983. At the same time he followed the customary trajectory,



writing his PhD (awarded in 1984); this was on the Caucasian region in the early Bronze Age, pointing to his ability to tackle wide sweeps of archaeology, which was one of his main characteristics. His examiners were the redoubtable James Mellaart (London) and Machteld Mellink (Bryn Mawr). He also, as usual, provided a backstop in the event that a university career was not forthcoming: a Diploma of Education (1983), to enable him to teach in schools. He and Claudia in that year bought their first and only house, in Kew, demonstrating that they belong to a rare minority, that of stable people.

Then his life changed, because of another's tragedy. In February 1984, just before the beginning of first term, Culican died in his sleep from heart failure, at the age of 55. The whole academic year was about to begin, and Tony had already started teaching at a Melbourne secondary school. Without the slightest qualms, he stepped up to assume the full duties of a lecturer for the year in two courses, and conducted all the examinations. The courses covered Sumer, Akkad, the Elamites, India, Persia and Greek and Phoenician colonisation, and Prehistoric sequences in southwest central Asia.

That same year, the lectureship in archaeology was advertised. The field of applicants was large and strong. All contenders stated, of course, that they thought they could do the job, or that they hoped they could. I pointed out to the selection committee that Tony had an unchallengeable claim: he was already doing the job, and had proven that no one could be more capable. Equally important, we knew what a splendid colleague he was. He was given tenure. In 1989 he was promoted to Senior Lecturer, in 1995 to Reader (and Associate Professor), and finally in 2006 to a chair. Despite his enormous productivity in research, it was not all plain sailing. On one occasion he made the mistake of listing new projects and was told by the committee that it would first wait to see how they went!

A further great change occurred in Tony's academic life in the later 1980s. Archaeology had been taught in the School of History, first by John Mulvaney (1954–1964), then by Culican (1966–1984), and then by Tony. In 1983 a new professor of Classics was appointed, Michael Osborne. He saw a way to strengthen that discipline (in truth under threat from the 1970s—when it branched out to include Modern Greek) by gathering together the archaeologists, some also in Fine Arts. Tony was too attractive a catch and a solid tradition was broken—but it all depended on the towering presence of Osborne, who left at the beginning of 1990. I told Tony that Culican would never have gone over. I was left as the only ancient world academic in the School of History, and Tony experienced some discomfort in a Classics Department, because although he was a gifted linguist, he did not have Greek or Latin, and there were many conflicting currents requiring strong natational abilities.

His new world was, it must be admitted, very exciting. He had as colleagues Peter Connor, expert in classical archaeology (in Classics since 1965), Elizabeth Pemberton, who excavated at Corinth (from Fine Arts), and the French-speaking Belgian Assyriologist Guy Bunnens (from Middle Eastern Studies). A very strong archaeology programme was developed, and Tony's capacities and character made him a dominant figure.

Since Guy Bunnens was a specialist in Mesopotamia, Tony's courses concentrated on prehistorical archaeology from the evolution of humans to the Neolithic at first year level, and the archaeology of Western Asia from 3600 to 330 BC at second and third year levels. He also taught Theory, Methods and Techniques of Archaeology to third years, a prerequisite for Honours.

Tony's great attraction for students is best demonstrated by the number of postgraduate theses he supervised. There were almost 30 Masters' degrees, and more than 20 completed PhDs, and another six in hand. He was a dedicated and inspiring supervisor. He may rest content with the assurance that he has left scores of highly qualified researchers and excavators to carry the torch. What most would not realise, however, is that he helped many young overseas scholars with their archaeological experience, theses and publications. On the other hand, many Melbourne students worked on Turkish excavations conducted by people such as Altan Çilingiroglu at Ayanis.

Tony served, of course, on endless committees at departmental, faculty and university level, and was head of department or school 1996–1997, 2004–2006 and 2010.

Serious health problems began to arise in 2009. After long treatment, he made a temporary and deceiving recovery, then fell victim to leukaemia. He died on 29 June 2017. A fundamental side of his character was revealed in this: for all his seeming extroversion, he was a very private person. He did not reveal his illnesses and sought no sympathy. And while suffering such pain and distraction, he was able to complete so much.

He was the author of four books in his own name, beginning with the publication of his thesis in BAR (1984), and splendid survey volumes such as *The Heritage of Eastern Turkey: From the Earliest Settlements to Islam* (2006), and the *Archaeology of the Caucasus* (2017). Another volume was co-authored with Paul Zimanksy, *Ancient Turkey* (2009) and with Claudia, *Archaeology at the North-Eastern Anatolian Frontier* (2004). For archaeologists, however, editing volumes, usually with others, is a natural and major task, and they ranged for him from ochre mining in Tasmania (1994) to *Festschriften: A view from the Highlands*, for Charles Burney (2004), the sixth (2007) and seventh (2012) Anatolian Iron Ages colloquia, *Archaeology in the Southern Caucasus: Perspectives from Georgia* (2008), *Ceramics in Transitions: Chalcolithic through Iron Age in the Highlands of the Southern Caucasus and Anatolia* (2012), and *Anzac Battlefield: A Gallipoli Landscape of War and Memory* (2016). The major focus is clear, but the full circle from Tasmania to Gallipoli is an intriguing embrace.

To these must be added another arduous task of editing. The Department of Middle Eastern Studies had long published its own journal: *Abr-Nahrain*. Tony inherited this and changed its name from volume 36 (1999) to the more recognisable *Ancient Near Eastern Studies*. He edited the next 18 volumes.

Chapters in books and journal articles number more than 70. Many are co-authored, but they cover again from Tasmanian ochre mining (mining which reappeared in Qafzeh Cave!), to el-Qitar and Tell Nebi Mend in Syria, to the Caucasus (especially Georgia: Samatavro, Chobareti) and trans-Caucasus, Anatolia (Büyüktepe Höyük, Sos Höyük), and, of course, Gallipoli.

To those may be added more than 20 published conference papers. These were mainly given at the international symposia of Anatolian excavations, from the 1990s, where the leading Turkish figures must have awaited with anticipation the latest discoveries of the moustachioed colleague from the far south. Tony was, in fact, invited to give papers at international conferences from 1989, and did so on 28 occasions, almost every year until 2016. In some years he gave up to four papers.

He was sought as a speaker all around the world, especially on Anatolian and Georgian archaeology and Gallipoli: at Valetta in Malta, at the Metropolitan Museum in New York, and the universities of Michigan, Pennsylvania, Cornell, Heidelberg, Tübingen, Munich, and Columbia.



Those who heard him in the lecture room and in public will always remember the gripping performance, not a note in sight (no mumbling, head down in a text for him!), stunning slides, and total control over his material.

His international reputation is demonstrated by the many publications for which he served on the editorial board, such as *Studi di Preistoria Orientale* at the Sapienza in Rome, the Turkish Academy of Sciences, and most importantly, *Ancient Near Eastern Studies* and their monograph series in Louvain. He was a recognised reviewer for journals as important as the *American Journal of Archaeology*, *Anatolian Studies*, and *BASOR*. He was an assessor of applications to the Australian Research Council and famous international bodies such as the National Science Foundation and National Endowment for the Humanities (USA).

Archaeological work is necessarily expensive. In a world increasingly ferociously competitive for grants, Tony won many Faculty of Arts and University of Melbourne grants in the 1980s, then gained many small and several large ARC grants (especially for northeastern Anatolia).

He cut his archaeological teeth in the trenches here in Australia at Lake Bolac in Victoria (1975) and the ochre mine at Toolumbunner in Tasmania (1985–1986), and in Syria, at Tell Nebi Mend (1978), directed by Peter Parr, and El Qitar (1982, 1984), directed by Culican and Tom McLelland. He then moved up to be project director in northeast Anatolia at Büyüktepe Höyük (1988–1993) and Sos Höyük (1994–2003), and project co-director in Georgia at Samatavro (2008–2010), Tchkantiskedi (2011), and Chobareti (from 2012). He finally became Field Director of the Joint Historical and Archaeological Survey at Gallipoli (2010–2014). It is important to emphasise what a tribute to his reputation these international permits were, springing from the contacts he so easily made with Turkish and Georgian archaeologists whom he met at international conferences. To excavate in these countries also required strong diplomatic skills, which he possessed in abundance.

His Turkish colleagues included Altan Çilingiroğlu; Serap Yahlah and then Mesut Güngör (both directors of the Erzurum Museum) at Büyüktepe Höyük; and Mustafa Erkmen (director of the Erzurum Museum) at Sos Höyük. Georgian colleagues included David Lordkipanidze (director of the Georgian National Museum), Vakhtang Nikolaishvili, Gela Giunasvili, Giorgi Manjegaladze and Kakha Kakhiani (all from the Otar Lordkipanidze Centre of Archaeology), and the late Tamaz Kiguradze (Georgian National Museum). And finally from 2009, the archaeology of Gallipoli project was conducted in collaboration with Canakkale University.

As always, politics often clashed with archaeology. In their first visits to Georgia, in 1981 and 1982, Tony and Claudia were allowed only a 12 days' visit as tourists. It is moving to read what many of Tony's Turkish and Georgian colleagues have written not only to express their appreciation of his collegiality, but also to record the lasting family friendships which developed. Tangible evidence of Tony's gratitude was his bringing of some of these friends to Melbourne to share university life here: Altan Çilingiroğlu (1989), Tamaz Kiguradze (1998), Eşref Abay (2010), and Attila Batmaz (2013–2014).

To understand what was central to his archaeological life, we are fortunate to have his own words:

The unifying theme in my research career has been the way fieldwork on the material culture of ancient highland communities of Anatolia and Caucasus can broaden our understanding of general archaeology, extending our understanding of cultural dynamics in the mountains, and



In the early days of excavation at Büyüktepe Höyük

answering questions that extend across history, the natural sciences, and physical and cultural anthropology.

My research has necessarily meant working on several levels at once, across a broad range of disciplinary and interdisciplinary approaches. At one end I have nearly three decades of continuous involvement in detailed archaeological fieldwork in areas that were for the most part archaeologically poorly understood. At the other end, I have explored the broader conceptual questions those data pose to the general field of archaeology, including ethnicity and group identity, boundaries and frontiers, the construction of social and religious landscapes, and the relationship between nomadism and a sedentary life.

He had worked at the beginning of his career in the desert. He later came to love the totally different world of the ‘highlands’ and showed his delight in those landscapes by the amazingly beautiful slides he showed at the beginning of each lecture. It must have been exhilarating to be on dig with him in such places.

Turkey and Georgia can be countries of extreme conditions. As field director Tony realised the importance of basic creature comforts for his excavating team. He may have revered the legendary Flinders Petrie, but he did not want members of his team ending up with ptomaine poisoning. Elizabeth Pemberton remembers his discovering nutmeg in the Bayburt market and taking over part of the restaurant where the team ate to cook delicious spaghetti Bolognese for everyone. Tony himself loved food, especially Italian and Middle Eastern—and Claudia’s parmigiana.

Honours were heaped upon him: he was elected a Fellow of the Society of Antiquaries (London) (2004), and a Fellow of the Australian Academy of the Humanities (2005), and, unusually for someone in his fields, appointed a member of the Order of Australia (2013).

Along with other Australians, such as Jenny Webb in Cyprus, Tony put our country on the international archaeological map. This is no mean feat. Despite modern means of communication and travel, researchers in the great cities of Europe and the USA have no idea how much harder is the same work at what is still the end of the world—but we compete on what is ignorantly asserted to be a ‘level playing field’. Tony’s chief academic successor is Andrew Jamieson, who became his student in 1985. He is an accomplished archaeologist, inspiring lecturer, and gifted curator of innovative exhibitions.

When all of us think of Tony, we also automatically think of Claudia. Tony picked her out while they were both students, precisely because of her enthusiasm for archaeology. They formed the perfect pair, understanding the golden recipe for success: equality but complementarity. Overlap and duplication in such marriages often lead to boredom or rivalry. They shared all of each other’s interests, but had their own specialities, and Claudia’s is the fascinating island of Malta, where Culican had done much work (he told hilarious stories of excavating in flea-ridden cavities of restricted size). Claudia was an important member of all Tony’s excavations. Matching Tony’s AM is Claudia’s Order of Malta. They had one child, a daughter with the beautiful name Amadea. She has a son, Harland, who was, as everyone would expect, his grandfather’s joy.

Tony’s 60th birthday was celebrated by a *Festschrift*. He did not, unfortunately, live to see it in print, but he knew of the project and was shown its contents. It is, by definition, a hefty volume: 86 contributors from around the world. My own small chapter was designed to pull his leg: ‘where archaeology meets history’. I know that he would have laughed uproariously.

There was another side to him, which I often saw. He was as deeply concerned as everyone else at the way universities are being corporatised and politicised. We had many serious conversations over lunch, and he could be relied upon for common sense and commitment.

Our final and imperishable impressions of the man are, however, two: his fantastic energy—his death at the age of 61 is intolerable—and his happy nature—his flashing smile and ringing laugh. We can only imagine what he might have gone on to do in the next 20 or 30 years, and how much fun we would all have shared.

I am most grateful to Claudia and Andrew for their expert help with this obituary, and to the University of Melbourne archives.

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# *Ancient Near Eastern Studies,* Formerly *Abr-Nahrain*: A Brief History

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The death of Antonio (‘Tony’) Sagona on 29 June 2017 deprived the field of Near Eastern archaeology generally, the University of Melbourne in particular, and this journal specifically, of a most distinguished scholar and accomplished editor.<sup>1</sup>

In 1999, Tony assumed the editorship of *Abr-Nahrain*, an annual referred journal originally produced under the auspices of the department of Semitic studies at the University of Melbourne and established in 1959 by Professor John Bowman. In his first year as editor, and in a rather bold move, Tony changed the journal’s name to *Ancient Near Eastern Studies* (ANES), which he felt “better reflected the contemporary identity and future of the journal as a modern and lively forum for scholarly studies on the ancient Near East.”<sup>2</sup> Further changes were initiated by Tony during his tenure as ANES editor (see below).

As a new editorial team now takes over, it is timely to reflect on the journal’s origins and Tony’s seminal contribution to ANES.

The founder and first editor of *Abr-Nahrain* was John Bowman. Bowman had been appointed professor of the department of Semitic studies at the University of Melbourne in 1959, replacing Maurice Goldman, the department’s inaugural professor (see below).<sup>3</sup> Goldman died in 1957, leaving his library and the bulk of his estate to the university for the benefit of the department of Semitic studies.<sup>4</sup> Importantly, his generous bequest was instrumental in providing the financial resources required for the establishment and ongoing production of *Abr-Nahrain*.

## Maurice Goldman

Maurice David Goldman (Fig. 1) was born on 13 January 1898 in Kolo, Poland (then part of the Russian Empire). He was the son of retail merchant and scholar Arie Lejb Goldman, and his wife Golda, née Kozminska. In her biographical account of Goldman, Nina Christesen reports that after graduating from gymnasiums at Gostynin and Lodz, in 1917 Goldman went to study medicine at the University of Warsaw, also joining various language seminars in his free time.<sup>5</sup> Christesen goes on to record that Goldman transferred to the University of Berlin in 1920 to read Islamic culture

<sup>1</sup> For obituaries on Emeritus Professor Antonio Sagona see Ridley (this volume), Jamieson 2017a and 2017b and Pemberton 2017.

<sup>2</sup> Sagona 1999.

<sup>3</sup> Sagona 2006, pp. 3–6.

<sup>4</sup> Christesen 1996, p. 287.

<sup>5</sup> Christesen 1996, pp. 286–287.



1. Maurice Goldman

Latin at school; and he mastered all the Semitic languages. It is estimated he had a “working knowledge of forty languages.”<sup>6</sup> He became an Australian citizen in 1944. A personal chair was created for Goldman at the University of Melbourne in 1945, initially supported by a benefaction from businessman Abraham Sicree.<sup>7</sup>

and Oriental languages under Professor Eugen Mittwoch. He completed his D.Phil. in 1925, then lectured in Hebrew, Aramaic, Islamic culture, Arabic and Ethiopic at various German tertiary institutions.

In 1938, after visiting London, Goldman travelled to Australia, arriving in Melbourne on 2 January 1939. At the time, his sister was living at Horsham in country Victoria. During World War II he worked as an interpreter in the censor’s office. A brilliant linguist, Goldman was proficient in modern Hebrew, Polish and Russian; he had studied French, classical Greek and



2. John Bowman

### John Bowman

John Bowman (Fig. 2), who replaced Goldman at the University of Melbourne, was also a gifted linguist and a biblical scholar with wide-ranging interests. John was born in Ayr, Scotland, into a devout Presbyterian family who encouraged his studies and early interest in the Bible. Educated at Ayr Academy, he completed the ancient Greek syllabus in one year, winning several medals in Classics, before moving to Glasgow University, where he read ancient languages and biblical studies and was honoured with the Orientalist Prize. He furthered his studies at Balliol College, University of Oxford, and was awarded his doctorate in 1945 for *The Pharisees: A Critical Investigation*. In 1947 he joined the department of Semitic studies at Leeds University.

In 1959 Bowman was appointed to the chair of Semitic studies at the University of Melbourne.<sup>8</sup> During his tenure, the department offered lectures in

<sup>6</sup> Christesen 1996, p. 286.

<sup>7</sup> Christesen 1996, p. 287.

<sup>8</sup> Sagona 2006, p. 4.

Arabic, Hebrew and Syriac language and literature, and on related cultures, encompassing the ancient Near East, Judaeo-Christian studies, Islamic studies and the modern Middle East. In addition, Bowman supported research in Akkadian, Ugaritic, Semitic inscriptions, and biblical archaeology and the archaeology of Palestine. Soon after his arrival, Bowman founded two annual periodicals, *Abr-Nahrain* (now *Ancient Near Eastern Studies*) and *Milla wa-Milla* (*Australian Bulletin of Comparative Religion* [1961–1979]). These initiatives, as Tony Sagona would later note, provided “researchers in Australia with a forum for publication.”<sup>9</sup>

In his editorial for volume 1 of *Abr-Nahrain* (1959–1960), Bowman announced that

*Abr-Nahrain*, of which this is the first number, will appear annually. It is the publication of the Department of Semitic Studies of the University of Melbourne. This Department has a staff of one Professor and seven full-time and two part-time lecturers. Its specialists range over the fields of Biblical and Archaeological Studies, Arabic and Islamic Studies, Hebrew, Samaritan, Aramaic/Syriac and Comparative Religion, the latter including Mahayana Buddhism. The name of the publication may seem enigmatic. It is intended to convey our range and the direction of researchers; Beyond Two Rivers. The rivers mean in their context the Nile and the Euphrates. It is not however with the rivers themselves that we are concerned, but with the regions beyond in Africa and Asia.<sup>10</sup>

He went on to thank his predecessor, Maurice Goldman, and the department’s generous benefactors. He also drew attention to new directions taken under his own stewardship, including a fresh commitment to encouraging postgraduate research, which he in fact called “the justification for [the department’s] existence.”<sup>11</sup>

With the publication of volume 3 (1961–1962) the *Abr-Nahrain* editorial team expanded to include E. C. R. MacLaurin (from Sydney) as Associate Editor, and William Culican (from Melbourne) (Fig. 3) as Assistant Editor, alongside Bowman as Editor. This expansion reflected an editorial association that was formed with the department of Semitic studies from the University of Sydney.<sup>12</sup> Around the same time, the journal’s supplementary series was launched. The first monograph to appear was L. A. Meyer’s *Bibliography of the Samaritans*, which Bowman announced in his preface to volume 4 of the journal (1963–1964).<sup>13</sup> With the publication of volume 5 (1964–1965), Arthur Dudley Hallam (Fig. 4), lecturer in Old and New Testament studies, replaced William Culican, lecturer in biblical archaeology, as the Assistant Editor. Volume 6 mentions that the name of the department of Semitic studies at Melbourne had been changed to the department of Middle Eastern studies to better describe the range of studies being undertaken in the department. By Volume 7 (1967–1968), the collaboration with the University of Sydney had come to an end, and the editorial team was all Melbourne-based: J. Bowman, Editor, A. D. Hallam, Associate Editor, and J. A. Thompson (Fig. 5), Assistant Editor.

In all, Professor John Bowman oversaw the publication of volumes 1–18 (1959–1979) of *Abr-Nahrain*. When he retired in 1980 he was replaced by Hebraist Takamitsu Muraoka.

<sup>9</sup> Sagona 2006, p. 5.

<sup>10</sup> Bowman 1961, p. 1.

<sup>11</sup> Bowman 1961, pp. 1–2. On the beginning of ancient world archaeology at the University of Melbourne, see Davey 2014, pp. 21–30.

<sup>12</sup> Bowman 1963, p. vii.

<sup>13</sup> Bowman 1964, p. viii.



3. William Culican

*The Ambassador for Israel, Mr Avraham Kidron, right, presents Mr Arthur Hallam with a scroll.*

4. Arthur Dudley Hallam



5. J. A. Thompson





6. Takamitsu Muraoka

### Takamitsu Muraoka

Takamitsu Muraoka (Fig. 6) was born 1938 in Hiroshima. After studying general linguistics and biblical languages under Professor M. Sekine at Tokyo Kyoiku University, he studied at the Hebrew University of Jerusalem, completing his dissertation *Emphasis in Biblical Hebrew* with Professor C. Rabin as supervisor, and obtaining his doctorate in 1970. Before coming to the University of Melbourne he taught Semitic languages including modern Hebrew at

Manchester University (1970–1980). Muraoka was appointed professor of Middle Eastern studies at the University of Melbourne in 1980. He edited volumes 19–30 (1980–1992) of *Abr-Nahrain*.

In 1989, under Muraoka's stewardship, the publishing of *Abr-Nahrain* was transferred from E. J. Brill in Leiden to Peeters Publishers, Leuven. In his editorial for volume 28 (1989) Muraoka expresses his appreciation for financial assistance provided by the Maurice Goldman Trust Fund and is "pleased to announce... that an international team of distinguished scholars, have agreed to serve on the Advisory Board."<sup>14</sup>

In addition to his editorial role with *Abr-Nahrain*, Muraoka was also author of several volumes in the supplement series: *Ancient Hebrew Semantics* (no. 4), *Semantics of Ancient Hebrew* (no. 6), *A Grammar of Qumran Aramaic* (no. 38), and *Jacob of Serugh's "Hexaemeron"* (no. 52). His comprehensive *Syntax of Septuagint Greek* appeared in 2016. After Muraoka left Melbourne, he took up the Chair of Hebrew, Israelite Antiquities and Ugaritic at Leiden University in the Netherlands, which he held from 1991 till 2003. To this day, he remains an active and much valued member of the editorial board of *Ancient Near Eastern Studies*.

### Guy Bunnens

With Muraoka's departure to Leiden, Guy Bunnens (Fig. 7), senior lecturer in Middle Eastern studies, took on the role of *Abr-Nahrain* editor, overseeing volumes 31–35 (1993–1998). Bunnens received his PhD from the University of Brussels (Belgium) in 1974 with a thesis on the Phoenician expansion in the Mediterranean (*L'expansion phénicienne en Méditerranée*). After holding research positions in Belgium, Rome and Los Angeles, he started lecturing on the history and archaeology of the ancient Near East at the University of Melbourne in 1986. In addition to editing *Abr-Nahrain*, Bunnens was



7. Guy Bunnens

<sup>14</sup> Muraoka 1990.

responsible for two monographs in the supplement series, *Tell Ahmar 1988 Season* (no. 2)<sup>15</sup> and *Cultural Interaction in the Ancient Near East* (no. 5).

In his editorial for volume 31 (1993), after noting Professor Muraoka's departure for Leiden, Bunnens writes, "Another major change concerns our Department itself. From 1994 onwards it will be renamed Department of Classics and Archaeology. The focus of the journal, however, will remain the same, namely the ancient Near Eastern languages and cultures."<sup>16</sup>

Bunnens was to retire from the university in 1999. He remains a member of the editorial board of *ANES*, a service for which the current editors are indebted to him.

### Antonio Sagona

With the departure of Guy Bunnens, Tony Sagona took over editing the journal, quickly introducing several major changes. In his first editorial, in volume 36 (1999), he writes,

Regular readers of this journal will notice changes in this issue, the most obvious being the name *Abr-Nahrian* is now *Ancient Near Eastern Studies*. This decision, it was felt, better reflected the contemporary identity and future of the journal as a modern and lively forum for scholarly studies on the ancient Near East. We will continue to consider contributions from all disciplines that pertain to the study of ancient Near East, and, in fostering a holistic approach to that study, we will endeavour to provide a balance between articles concerned with text and those that deal with material culture. I wish to express my gratitude to our publishers, Messrs Peeters, who have supported fully the scope of the changes, and the Maurice Goldman Trust of The University of Melbourne for the generous subsidy that was used for the preparation of this volume.<sup>17</sup>

Further changes initiated by Tony reflected his talent for visual design: in 2006 (volume 43) he overhauled the cover art, introducing the distinctive dark blue theme; in 2012 (volume 49), colour plates were added; and in 2013 (volume 50), a new larger-scale format appeared. In 2016 (volume 53) Tony appointed Abby Robinson *ANES* executive editor, the first woman to have editorial responsibilities on the journal.

In addition, Tony and his wife Claudia, also an archaeologist, embarked on a most ambitious editorial role in overseeing the production of more than 40 monographs in the *ANES* supplement series.

As in all other aspects of his work, Tony was a great supporter of emerging talent in his role as publisher. He extended invitations to numerous graduate students and early career researchers, in Australia and abroad, to submit their work to be considered for the journal or supplement series. One of his final contributions was to see monograph no. 53, *Metal Jewellery of the Southern Levant and its Western Neighbours*, through to completion. Written by Josephine Verduci, it was based on her PhD, successfully completed at Melbourne in 2015. This part of Tony's legacy will continue when monographs he commissioned based on doctoral dissertations by Giorgi Bedianashvili (École pratique des hautes études, Paris) and Jarrad Paul (University of Melbourne) are published in years to come.

<sup>15</sup> In 1988 Guy Bunnens resumed archaeological excavations at Tell Ahmar (ancient *Til Barsib*) in Syria.

<sup>16</sup> Bunnens 1993, p. vii.

<sup>17</sup> Sagona 1999, p. 3.

Tony had already begun production of *ANES* volume 55 (2018) before he passed away on 29 June 2017. The new editorial team is committed to maintaining the fine standards set by Tony and the editors that preceded him, and continuing their focus on both the texts and the material culture of the ancient Near East. We are grateful to the members of the *ANES* editorial advisory board for their ongoing support and look forward to a thriving future for both the journal and associated supplement series. We would like to thank Paul Peeters and his team at Peeters, Leuven, most sincerely for their diligent and unflagging assistance, and the Maurice Goldman Trust of the University of Melbourne for the generous subsidy that continues to make the publication of the journal possible.

In terms of future directions, as well as continuing to cover *ANES*' already-established areas of specialisation, we look forward to an increased focus on the South Caucasus (namely Georgia, Armenia and Azerbaijan). For many years, Georgia was a major centre of Tony Sagona's fieldwork activities and we are pleased to report that the University of Melbourne plans to carry on his archaeological project there. Reports resulting from this activity will feature in *ANES*. Interestingly, the journal's connection with the Caucasus is not new: 50 years ago, the editorial at the beginning of volume 6 mentioned that "Dr J. A. Thompson and J. Bowman did archaeological work last August in West Azerbaijan. A report on the ancient Church/Monastery cut into the cliff face at Rasad-e-Khan, with plans of its cells and tunnels, will appear also in *Abr-Nahrain* Vol. VII."<sup>18</sup>

The discipline of ancient Near Eastern studies at the University of Melbourne has evolved over the years (see **Table 1**). The current Classics and Archaeology programme, which includes a number of subjects on the ancient Near East, largely exists due to the considerable energy of our late colleague and friend Tony Sagona. Without his monumental efforts, there would be no studies in Near Eastern archaeology at the University of Melbourne today. In the past, Melbourne's contribution in Syriac studies was especially significant in the international arena and it is pleasing to report that Syriac was recently re-introduced as an intensive subject at Melbourne. The university now also offers courses in Akkadian and Middle Egyptian. The costs associated with the teaching of these ancient languages are defrayed by the Spencer-Pappas Bequest, which Tony was involved in securing, the gift of Trudy Spencer (more about whom, see below). Today, Hebrew is still offered as part of the programme in Jewish Culture and Society in the School of Historical and Philosophical Studies (of which Classics and Archaeology is also a part),<sup>19</sup> and Arabic studies forms part of the Asia Institute at the University of Melbourne.<sup>20</sup>

<sup>18</sup> Bowman 1967.

<sup>19</sup> <http://arts.unimelb.edu.au/shaps/study/jewish-culture-and-society>

<sup>20</sup> <http://arts.unimelb.edu.au/asiainstitute/study/arabic>

## TABLE OF EDITORS

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Peeters Press, Leuven)

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I (1959–1960)	1961	J. Bowman	Department of Semitic Studies
II (1960–1961)	1962	J. Bowman	Department of Semitic Studies
III (1961–1962)	1963	J. Bowman (W. Culican) (E.C.R. MacLaurin)	Department of Semitic Studies & Department of Semitic Studies (Sydney)
IV (1963–1964)	1965	J. Bowman (W. Culican) (E.C.R. MacLaurin)	Department of Semitic Studies & Department of Semitic Studies (Sydney)
V (1964–1965)	1966	J. Bowman (A.D. Hallam) (E.C.R. MacLaurin)	Department of Semitic Studies & Department of Semitic Studies (Sydney)
VI (1965–1966)	1967	J. Bowman (A.D. Hallam) (E.C.R. MacLaurin)	Department of Middle Eastern Studies & Department of Semitic Studies (Sydney)
VII (1967–1968)	1968	J. Bowman (A.D. Hallam, J. Thompson)	Department of Middle Eastern Studies
VIII (1968–1969)	1969	J. Bowman (A.D. Hallam, J. Thompson)	Department of Middle Eastern Studies
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XXXVII (2000)	2000	A. Sagona	Centre for Classics and Archaeology
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# A Note on Trudy Spencer: Migrant, Psychiatrist, Scholar and Benefactor

Jennifer BALDWIN

## Abstract

*Throughout their history, the disciplines of classics, archaeology and middle eastern studies at the University of Melbourne have benefited from endowments, starting with the generous gift of the Sicree brothers in the late 1940s. The brothers' endowment enabled the University of Melbourne to establish what was then the Department of Semitic Studies and later became the Department of Middle Eastern Studies. This department and its later iterations produced many enthusiastic graduates and was renowned for its rich academic offerings and its fine scholars. One individual who studied in this department, Trudy Spencer, was moved to set up, by her will, a trust to ensure that the teaching of ancient civilisations and ancient languages continued into the future. This paper provides a brief overview of the life of Trudy Spencer (née Rabinowitsch), who left her country of birth, Austria, as a teenager and migrated not once but twice, eventually settling in Australia.*

## Early years and migration

Gertrude Rabinowitsch (or Trudy, as she liked to be called), the only child of Jewish parents, was born in Vienna in July 1922, at a time of great change. There is little information available about her childhood, but a series of family photos show that she was well dressed, and her friends recollect that she spoke of a loving family.

There was upheaval in the life of the Rabinowitsch family when the Nazi Party came to power in Germany in January 1933.<sup>1</sup> Trudy and her parents, Itzke and Feige, fortunately left Vienna in January 1936 and travelled to Tel Aviv in what was then the British Mandate of Palestine.<sup>2</sup> Unfortunately, when the family arrived in Palestine, the country was in turmoil, caused by strikes and political protests. The Rabinowitsch family nevertheless made a life for themselves there, enabling Trudy to finish her secondary education and begin work in a laboratory.

In March 1944, Trudy married Tibor Bandler and in April 1947, they migrated to Australia, sponsored by Trudy's uncle Leopold. They settled in Sydney, where Tibor changed his name to Theodore Spencer.<sup>3</sup> Documentation lodged with the Central Aliens' Bureau listed Tibor (now

<sup>1</sup> Large 1990, p. 76.

<sup>2</sup> The identity of Trudy and her parents was now stateless as listed on subsequent documentation: Commonwealth of Australia N.50/3/1341, landing permit C55760, 1 June 1950.

<sup>3</sup> Commonwealth of Australia. Form of Application for Registration. Registration Number 66043, 25 April 1947.

Theodore) and Trudy as stateless, formerly Czech. Trudy's parents, sponsored by Trudy and Theodore, followed them to Australia in January 1951.<sup>4</sup> Once settled in Australia, Trudy converted to Christianity, joining the Liberal Catholic Church in Sydney in 1948.<sup>5</sup>

### Psychiatrist

In the same year, 1948, Trudy began her medical studies at the University of Sydney. By 1957, Trudy and Ted (Theodore) had drifted apart and they divorced. Trudy launched herself into her professional career, having qualified as a doctor. Residencies in psychiatry in the United States followed in the next four years. Returning to Melbourne in early 1961, she joined the Mental Health Authority as a psychiatrist specialising in working with young offenders and wards of the state.

Apart from her professional work, Trudy enjoyed concerts, films, opera and art exhibitions. She was also a very spiritual person, as manifested through her adherence to Liberal Catholicism and Rosicrucianism. She married for the second time in 1977, to George Pappas. She travelled widely, both for her own pleasure and to relevant conferences and psychiatric establishments overseas to extend her knowledge. Her destinations included Japan, Thailand, China, Hong Kong, the United States, Central and South America. She also visited family in the United Kingdom and took a single trip back to her native Vienna in 1980. Friends recalled that the visit to Vienna was made with some trepidation, as she recalled the people from her childhood who had not survived the Holocaust.

### Scholar

Trudy's decision to undertake postgraduate studies in the Middle Eastern Studies Department of the University of Melbourne marked a very significant time of her life. The vibrant department was led by the eminent scholar the Reverend Professor John Bowman (founder of this journal). In 1974 Trudy enrolled in a part time Master of Arts degree, majoring in Middle Eastern Studies and the ancient Syriac language.<sup>6</sup> Her thesis was entitled: *John of Dara and the First Book of his Treatise on the Resurrection of Human Bodies*. Trudy's study of Syriac—a language in which many early Christian texts were written—enabled her to translate John of Dara's work into English. The first part of her thesis focussed on the author, a ninth-century Syriac scholar and theologian—the person, the context, his writings and theological emphases. The second part is a description of the structure and contents of the book and a description and critical appraisal of the four manuscripts of the book that Trudy located, copied and consulted.

Her degree took some time to complete, as she had an intermission of 10 years between 1981 and 1991. Her much respected supervisor, Dr James Fraser, died in 1986 and her second husband, George, to whom she was married for 12 years, died in 1989. She picked up her studies again, however, in mid-1991 and was able to finish and graduate with first class honours in late 1992,

<sup>4</sup> Commonwealth of Australia N.50/3/1341, landing permit C55760, 1 June 1950.

<sup>5</sup> Gertrude Spencer confirmation certificate, Liberal Catholic Church, 1948 (unpublished).

<sup>6</sup> University of Melbourne Calendar 1974, p. 765.





Trudy Spencer

aged 70. The examiners commended her research as “work of great value... with carefully crafted findings,” which were “the product of mature reflection.” “She has brought to her subject,” they noted, “a combination of competence and care that has resulted in her producing research that will provide foundational material for other workers in the field.”<sup>7</sup>

Among the four manuscripts she studied was one she examined during a personal visit to the Vatican Library in Rome in 1980. In addition, she read texts in French, German and Latin to aid her research. The profound effect of this research on Trudy and her commitment to her studies at the University of Melbourne is underlined by the dedication in the preface to her thesis: “To the memory of my respected and beloved teacher, Dr James Fraser.” Other academic staff of that time, Prof. John Bowman, Prof. Takamitsu Muraoka, Dr John Thompson and Dr Geoffrey Jenkins were also acknowledged.<sup>8</sup>

### Benefactor

In her will Trudy directed that a charitable trust in perpetuity be set up, The Spencer-Pappas Trust, with monies to support the teaching of ancient languages such as Syriac, Ancient Egyptian, Akkadian, Babylonian, and more, as well as the teaching of Middle Eastern studies.<sup>9</sup> It appears that her time spent as a student at the University of Melbourne in the Middle Eastern Studies Department, as it was then, influenced her profoundly. The establishment of the Spencer-Pappas trust reflects Trudy’s interest in knowledge and learning of diverse disciplines. The trust Trudy established enables the teaching of others in this field into the future. This speaks of the quality of generativity, which the psychologist Erik Erikson defined as “an interest in establishing and guiding the next generation.”<sup>10</sup>

Through the Spencer-Pappas Trust, those things which were important to Trudy have been able to live on. Her passion for the study of ancient languages and religions and theological understanding is underlined not only by the subject matter of her MA thesis, but also through her

<sup>7</sup> Spencer 1992.

<sup>8</sup> Spencer 1992, i.

<sup>9</sup> Spencer 2005, pp. 2, 3.

<sup>10</sup> Kotre 1984, p. 1.

extensive library of books on biblical and church history, biblical criticism, comparative religions, mythology and mysticism, to name a few. Her charitable trust to enable the study of ancient languages and Middle Eastern studies and her bequest of her books to various libraries and organisations have allowed others to read and treasure knowledge which was important to her.

Trudy's commitment and generosity in maintaining the teaching and study of languages and cultures of the ancient Near East is greatly appreciated and will benefit generations of students to come at the University of Melbourne. Her bequest supports the vision of building a world-class centre for the study of the ancient Near East at Melbourne, a vision shared by those scholars Trudy encountered in the Middle Eastern Studies department and enthusiastically promoted by the late Emeritus Professor Tony Sagona, himself an alumnus of the same academic programme.

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# Why is the Cain Genealogy (Gen. 4:17–24) Integrated into the Book of Genesis?

Nissim AMZALLAG

## Abstract

*The nature and function of the Cain genealogy (Gen. 4:17–24) are here reconsidered. Instead of a general overview of the fundamentals of civilisation, it is shown, through a re-examination of Jabal's specialty, that the Cain genealogy focuses on the society of Canaanite metalworkers and musicians/poets, the Qenites (= Kenites), and their status as YHWH's earliest worshippers. This analysis also reveals that the genealogy of Cain preserved the memory of the most important events in the development of copper metallurgy in the southern Levant—the transition from an archaic to an advanced mode of smelting, in the early fourth millennium BCE, and the subsequent specialisation that differentiated producers of copper from producers of metallic implements. These observations suggest that the Cain genealogy constitutes, together with the story of Cain and Abel, a coherent myth of Qenite origin. Consequently, the exposition of the Cain genealogy before and independently of the lineage from Adam to Israel becomes an unexpected feature. It is concluded that this situation stems from the need to demonstrate the Qenites' identity as the former people of YHWH and to separate them as far as possible from the emergence of YHWH's new people, Israel.\**

## Introduction

Genealogies are of great importance in the literature of the ancient Near East. The monotonous lists of “begats” confer the impression of a rhythmic, immutable order of the world immediately after its creation.<sup>1</sup> They give both temporal depth to the related events and legitimacy to leaders and kings. They are especially important for providing legitimacy to priests and religious practices.<sup>2</sup> They provide support to the cult of common ancestors, this being of importance for the emergence of political and religious cohesion. More generally, genealogies condition kinship between groups, tribes and clans, and in the emergence of nations. This is why they may be a precious source of information for revealing social, political or even cultural events (ancient or contemporary) on which the narratives are silent.<sup>3</sup>

\* Professor Shamir Yona, Patrick Jean-Baptiste, Abraham Abehsera and the two anonymous reviewers are here warmly acknowledged for their useful comments and contribution to the maturation of this work.

<sup>1</sup> Robinson 1986, p. 596.

<sup>2</sup> Wilson 1977, p. 45.

<sup>3</sup> For example, Johnson 1969, pp. 77–82; Andriolo 1973; Wilson 1977, pp. 132–133; Bryan 1987. Lombaard (2006, p. 147) concludes: “Far from being mere lists of blood relations, genealogies in cultures ancient and modern served multiple purposes. These include matters of law, inheritance, politics and diplomacy, economics, ideology, administration, theology,

The Book of Genesis relates the unbroken succession of generations from Adam to the sons of Jacob (hereinafter: the “long genealogy”). This is why many scholars interpret this entire book as a homogeneous opus organised as an extended genealogy of the tribes of Israel.<sup>4</sup> This long genealogy focuses on Adam, the first man; Noah, the new founder of mankind, mentioned ten generations after the first man; Abraham, appearing ten generations after Noah; Isaac; and Jacob, the founder of Israel.<sup>5</sup> The genealogies of Noah and Abraham are especially important for the Israelites, not only for their own identity but also for defining the nature of their relationship with their neighbours, who are also integrated into these lineages.<sup>6</sup>

This perspective, however, knows a notable exception. The *first* genealogy reported in Genesis is that of Cain (Gen. 4:17–24). It is not connected to the long genealogy, which runs immediately after, through Seth, the third son of Adam and ancestor of Noah, and the patriarchs. Thus, the story of Cain and his descendants contributes nothing, even indirectly, to our understanding of the succession of generations from Adam to the sons of Jacob and its socio-political implications, the central theme of Genesis. The separation of the Cain genealogy from the long genealogy is revealed by how the mention of the creation of mankind (male and female) in the likeness of god is couched in similar terms at the end of Genesis 1 and the beginning of Genesis 5. This similarity generates narrative continuity between the creation of man and woman in Gen. 1:27–30 and the beginning of the genealogy of Seth, which appears later (Gen. 5:1–3). This makes the genealogy of Cain, and Genesis 2–4 as well, look like a singular digression between the end of the creation of the universe and of mankind (Gen. 2:3) and the birth of Seth (Gen. 4:25), which marks the beginning of the long genealogy (Gen. 5).<sup>7</sup> This is confirmed by biographical details in the genealogies. Three are given for each of the individuals who participate in the linear succession of generations from Adam to the sons of Jacob: father’s age at birth, name of male firstborn, and lifespan.<sup>8</sup> These confer unity and homogeneity to the long genealogy. We do not find any such biographical details in the genealogy of Cain (Gen. 4:1–24).

These observations confirm that the genealogy of Cain (and probably the whole of Genesis 2–4) is not an integral part of the genealogical development from Adam to the sons of Jacob that organises the entire Book of Genesis. Questions then arise: why was the Cain genealogy introduced

identity, cultural criticism, historical and societal (re)-presentation, association, power, status aetiology, tradition, the military – usually in one sense or another to provide legitimacy to some current state of affairs.”

<sup>4</sup> See Fox 1989; Alexander 1993. This opinion is summarised by Mann (1991, p. 351): “The primary function of Genesis as a foreword is to place the stories of the family of Abraham and subsequently of the people of Israel within the framework of creation and world history. [...] The biblical redactors insist that the story of Israel begins in the beginning of the cosmos.”

<sup>5</sup> According to Malamat (1968) and Hartman (1972), the prestige of the Abrahamic lineage is supported by the reference to an antediluvian affiliation, exactly as in the genealogy of Sumerian kings.

<sup>6</sup> Steinberg 1989, p. 47; Alexander 1993.

<sup>7</sup> See Wilson 1977, p. 164. Robinson (1986, p. 599) concludes: “The order of creation established in Genesis 1 finds a natural continuation in the genealogy of Adam’s third son, Seth, in Genesis 5.” Moye (1990, p. 590) concurs: “The sons of Adam from Seth are listed on the far side of the Cain story almost as if Cain and Abel had never been.”

<sup>8</sup> Calculating the total lifespan of all the generations between Adam and Moses, Northcote (2007) attained a tally of 12,600 years, a number that appears extensively in eschatological traditions of the ancient Near East. This emphasises the importance of specifying each character’s lifespan, thus yielding a coherent genealogy that reaches its completion at the end of the list.



into Genesis and why is it positioned at the very beginning, even before the long genealogy? Three principal explanations have been proposed for this singular feature.

- *Cain as a civilising hero*: Cain and Abel are the first individuals in Genesis whose occupations—farmer and shepherd, respectively—are explicitly mentioned (Gen. 4:2). Cain is also the first individual who brings an offering to YHWH (Gen. 4:3) and the first city-founder mentioned (Gen. 4:17). Nothing is revealed in Genesis 4 about the four generations between Cain and Lamech (that is, Henoah, Irad, Mehujael, Metushael), but a ‘civilising impetus’ appears again with Lamech, the first composer of a song (Gen. 4:23–24). The sons of Lamech are also associated with two activities of importance in the development of societies: music (Gen. 4:21) and metallurgy (Gen. 4:22). For these reasons, scholars have concluded that Genesis 4, through the story of Cain and Abel and the Cain genealogy, carries the memory of the emergence of ancient Near Eastern societies.<sup>9</sup> If this were so, we should wonder why these prestigious ancestors, or at least their activities, were not integrated into the long genealogy. This is especially intriguing in view of the similarities found in the names of various members of the Cain and Seth lineages.<sup>10</sup> Cain and his lineage may indeed be regarded as the main early civilising heroes in Genesis, but this fact alone hardly justifies their inclusion in a genealogy independent of the long one.
- *Cain as an antihero*: Scholars have argued that the Cain lineage may represent an antithesis of the Seth lineage that launches the long genealogy.<sup>11</sup> This opinion is supported by the extensive development, in Genesis 4, of the story of Abel’s murder and its consequences (Gen. 4:2–16). The violence narrated in the song of Lamech (vv. 23–24) is also frequently considered an apotheosis of the sinfulness of Cain’s lineage, which is doomed to perdition in the Flood.<sup>12</sup> From such a perspective, the mention of the Cain genealogy becomes a *faire-valoir*, a foil that emphasises the antithetical righteousness of the members of the long genealogy.<sup>13</sup> This interpretation takes a negative view toward the civilising impetus consubstantial to the Cain genealogy.<sup>14</sup> This point, however, is challenged by the neutral way all the novelties introduced by Cain and his descendants are reported in Genesis 4. Furthermore, there is no trace of a curse attached to the descendants of Cain.<sup>15</sup> Finally, the mark of Cain (Gen. 4:15) symbolises divine protection, exactly like the mark that protects the righteous

<sup>9</sup> For example, Sawyer 1986; Pfoh 2009. According to Lombaard (2006, p. 152), the Cain genealogy is introduced to demythologise the emergence of arts and crafts, and their role in the emergence of ancient societies.

<sup>10</sup> Bryan 1987; Hess 1991.

<sup>11</sup> See Wilson 1977, pp. 155–156; Mann 1991, p. 361. Robinson (1986, p. 600) assumes that “the genealogy in Genesis 4:17–24 leading from Cain to Lamech, from one murderer to another, is by contrast an antigenealogy which expresses genealogically the sequelae of human decisions undertaken outside of the order established by God at creation. The use of the genealogy to link two murderers is highly ironic.” For Bryan (1987, p. 186), “The function of the Cainite lineage is primarily theological. The ancestry records the spread and outcome of the sin.”

<sup>12</sup> Brueggemann (1982, p. 65) stressed this singularity: “... As the story stands, the appearance of art in human history is linked to the vitality of the murderer, or at least to the one willing to engage in self-assertion.” See also Vermeylen 1991, pp. 176, 192, among many scholars.

<sup>13</sup> For Moye (1990, p. 590), “It is as if the linguistic echoes of the sons of Cain in the sons of Seth were present specifically to point to the cutting off of the line of Cain and the continuation of humanity in the line of Seth.”

<sup>14</sup> As reported by Paul (1996), this opinion was extensively defended by exegetes and theologians from late Antiquity to the Renaissance.

<sup>15</sup> Hamilton 1990, p. 237.

in Ezek. 9:4 and the forehead mark that identifies the Israelite prophets (1 Kgs. 20:41).<sup>16</sup> These elements challenge the interpretation of the Cainite genealogy as antithetical to the Sethite one (Genesis 5).

- *Cain as an eponymous ancestor*: In Genesis 4, Cain is first evoked as an individual (v. 2) and later as a collective: “If anyone kills Cain, vengeance shall be taken on him sevenfold” (v. 15). This collective use furthermore stresses that the mark of divine protection (v. 15) is given not only to Cain but also to all his descendants, the Qenites.<sup>17</sup> This characteristic led many scholars to conclude that the Cain genealogy as reported in Genesis 4 reflects Qenite traditions concerning the aetiology of their tribe/corporation and the identity of Cain, their eponymous ancestor.<sup>18</sup> This interpretation explains the independence of the Cain lineage from the genealogy of Israel but raises a new question: why are the Qenites not attached to the long genealogy as descendants of Canaan, son of Ham and grandson of Noah (Gen. 9:18), exactly as the many other Canaanite peoples (Siddon, Jebusites, Amorites, Girgashites, Hivites, Arkites, Sinites, Arvadites, Zemarites, Hamathites) are mentioned in Gen. 10:15–18? Their separate genealogy is especially intriguing in view of their enumeration among the Canaanite peoples whose land is given to Abraham as an inheritance (Gen. 15:19–21). We may wonder, again, why the Qenites are mentioned as an independent lineage in the book of Genesis and in such a prominent position.<sup>19</sup>

The lack of satisfying explanations for the insertion of Genesis 4 before the long genealogy suggests that something fundamental to our understanding of the Cain genealogy and its meaning has thus far been overlooked. This conclusion calls for further examination of this genealogy and, especially, the information given beyond the simple succession of generations.

### The sons of Adah as forefathers

Lamech is of central importance in Genesis 4. The specific mention of his wives (v. 19) likens him to Adam (v. 1) and Cain (v. 17), two ancestors mentioned together with their wives. Lamech is also the seventh descendant of Adam. This number, symbolic of the maturation/achievement of a process, is emphasised in the song of Lamech, in which this hero is likened to Cain (v. 24). The six verses devoted to Lamech, his two wives, and his four children (vv. 19–24, here again, seven individuals) contrasts with the terse mention of the four previous generations (vv. 17–18).<sup>20</sup> If, as already suggested, Lamech, his two wives, and his four children symbolise the completion

<sup>16</sup> Von Rad 1968, p. 105; Blenkinsopp 2008, pp. 141–143.

<sup>17</sup> Lohr 2009.

<sup>18</sup> This opinion has been defended for more than a century. For recent developments, see Wyatt 1986; Becking 1999, p. 180; Moberly 2007, p. 17; Blenkinsopp 2008, pp. 140–144; Day 2009; Mondriaan 2011, p. 415.

<sup>19</sup> The only other genealogy independent of the Abrahamic lineage is that of Seir (Gen. 36:20–30). Here again, however, the Seirite population has been identified with the Qenites. See McNutt 1994, pp. 114–116; Mondriaan 2010, pp. 13, 320–321.

<sup>20</sup> John Sawyer (1986, p. 162) concludes: “Finally, the contrast between the neutral and concise phraseology of the preceding verses, describing the inventions of Jabal and Jubal and the rich, difficult language of verse 22 is surely significant. It is not simply one among several traditions about the family of Lamech: it is the main tradition, the main characteristic, the climax of the description.”

of the Cain genealogy,<sup>21</sup> an attentive examination of the content of verses 19–24 may cast light on the importance of this genealogy.

Lamech's four children are treated differently in Genesis 4. Jabal and Jubal, the two sons of Lamech's first wife, Adah, are considered the forefathers of members of certain professions (vv. 20–21). This is not the case for the children of Zilla, Lamech's second wife (v. 22): Na'ama's vocation is not specified and Tubal-Cain, the smith, is in no way identified as the founding father of that occupation.<sup>22</sup> This invites us to focus our attention first on the sons of Adah.

Jubal, the second son of Adah, is "the father of all those who play the lyre and pipe" (v. 21). This makes him the patron of all Canaanite musicians. The specialisation of her firstborn, Jabal, however, is more obscure: "... the father of those who stay in a tent and *mīq<sup>e</sup>neh*" (*ʾābī yōšēb ʾohel ūmīq<sup>e</sup>neh*) (Gen. 4:20). *Mīq<sup>e</sup>neh*, in this verse, is generally understood to designate livestock.<sup>23</sup> Though this meaning is extensively encountered in Genesis,<sup>24</sup> the identification of Jabal as the father of tent-dwelling breeders is somewhat problematic, because *cattle* can hardly be the complement of a verb designating the action of sitting and/or dwelling.<sup>25</sup>

To resolve this problem, emendations have been proposed. Most translators add a verb before *mīq<sup>e</sup>neh* that expresses the breeding activity ("the father of he who sits [in] a tent and [breeds] cattle").<sup>26</sup> Others add an adverb before *mīq<sup>e</sup>neh*, making Jabal the ancestor of "whoever dwells in a tent and (among) cattle."<sup>27</sup> These interpretations designate Jabal the father of tent dwellers and cattle keepers. In yet another emendation, the *waw* preposition of *mīq<sup>e</sup>neh* is transformed into a final *yod* attached to the previous word, *ʾohel*. This artifice generates the construct form *ʾohalē mīq<sup>e</sup>neh*, an expression encountered in 2 Chr. 14:14 and literally translated as "tents of cattle". This meaning, however, is problematic because one does not expect livestock to dwell in tents, a habitat generally reserved for humans.<sup>28</sup> This is why this expression is modified to become "the tents of those who had livestock" (KJV) or "the encampment of herdsmen" (JPS). These necessary

<sup>21</sup> This assumption is strengthened by the parallel mention of Lamech in the Sethite genealogy, with a lifespan of 777 years (Gen. 5:31) and his identity as Noah's father (Gen. 5:29). In Genesis 5, exactly as in Genesis 4, Lamech symbolises the completion of a process, in this case recovery from the curse of Adam and the expulsion from the Garden of Eden: "And [Lamech] called his name Noah, saying, 'Out of the ground that YHWH has cursed, this one shall bring us relief from our work and from the painful toil of our hands'" (Gen. 5:29). See Hess 1991, pp. 22–23.

<sup>22</sup> Tubal-Cain is systematically treated as the forefather of metallurgy, despite the absence of such information in v. 22. Wilson (1977, p. 143) explains this singularity as follows: "The omission of the expected introductory phrase may be due to haplography caused by homeoteleuton, and the original text probably included the words *hū' hāyāh 'abī kol-* before the word *lōrēš*." Some scholars (for example, Freedman 1952, p. 192) have even attempted to justify this interpretation with the help of singularities in the LXX translation. The ability to integrate this feature into the present interpretative framework, however, makes such a premise unnecessary.

<sup>23</sup> For example, Stade 1894, pp. 259–260; Dillmann 1897, pp. 200–201; Von Rad 1968, p. 107; Westermann 1984, p. 330; Hamilton 1990, p. 239; McNutt 1999, p. 45; Lombaard 2006, p. 45; Day 2009, p. 338; Blenkinsopp 2011, p. 86. This interpretation is supported by the LXX translation of *mīq<sup>e</sup>neh* in Gen. 4:20 as *κτηνοτρόφων* (= *cattle rearer*).

<sup>24</sup> For example, Gen. 13:7, 26:14, 29:7, 30:29, 31:9, 47:17–18. See BDB, p. 889.

<sup>25</sup> Wilson 1977, pp. 141–142.

<sup>26</sup> Vermeylen (1991, p. 181) suggests reusing the name *Jabal* itself as the missing verb before *mīq<sup>e</sup>neh*; he interprets it as *to lead*. Therefore, Jabal, by his very name, becomes the cattle-rearer, as translated by the Septuagint.

<sup>27</sup> See DCH, vol. 5, p. 469.

<sup>28</sup> When explicitly mentioned in the Bible, livestock are evoked as living in booths (for example, *sūkkōt*, Gen. 33:17) or within sheepfolds (for example, *gīd'rōt šō'n* Num. 32:16, 24). In Judg. 6:5a, too, a clear distinction is stressed between cattle (*mīq<sup>e</sup>neh*) and tents (inhabited by humans) by the unusual position of the verb in the sentence: "For they with their livestock would come up and their tents."

modifications in 2 Chr. 14:14, however, weaken its use for justifying emendation into *ʾōhalê mīqʿneh* in Gen. 4:20.

The semantic incongruity is not the only inconsistency attached to the interpretation of Jabal as forefather of herders in Gen. 4:20. At least three further problems are engendered by such an interpretation:

- *First mention of herding*: Since Abel, Adam's second son, is mentioned as a herdsman in Gen. 4:2, Jabal can hardly be considered as the father of this activity.<sup>29</sup> To resolve this problem, scholars have suggested that Abel's flock (*šōʾn*) comprised only small cattle, whereas Jabal's *mīqʿneh* included large domesticated animals.<sup>30</sup> In such a case, we might expect Abel to be mentioned as the father of (small) livestock and Cain as the father of farmers. These appellations, however, are lacking in Genesis 4. This means that the Cain genealogy is not concerned with revealing the origins of agriculture and animal husbandry, making it even more difficult to attribute to Jabal the founding of one of these activities.
- *Qenite affiliation*: The identification of Jabal as the forefather of herdsmen implies that all Canaanite nomadic shepherds should be affiliated with him. This would include even the patriarchs of Israel, all explicitly described as livestock raisers who dwell in tents (Gen. 46:31–34). Such a situation challenges the separation of the Cain genealogy from the long genealogy. It also clashes with the interpretation of the Cain genealogy as specifically attached to the Qenite tribe.
- *Nomadic life and livestock husbandry*: The way Jabal's special vocation is evoked introduces an essential link between nomadic life and *mīqʿneh*. Such a link, however, is not constitutive of livestock raising, because village farmers also had cattle. If *mīqʿneh* truly means livestock, we must assume here that the Cain genealogy introduces different forefathers for nomadic and sedentary breeders, an interpretation that is difficult to support.<sup>31</sup>

Beyond the classical view of Jabal as the forefather of herdsmen, two further interpretations of his activities—trade and weaving—have been proposed. Here again, however, problems arise:

- *Jabal as the father of trade*: The meaning of *mīqʿneh* as “acquisition”<sup>32</sup> has led scholars to translate the formula *yōšēb ʾōhel ûmīqʿneh* as “traders who dwell in tents” and to identify Jabal as the father of commercial transactions.<sup>33</sup> Exactly as previously discussed in regard to herding, however, commerce cannot be considered specifically restricted to the Qenites, and all traders from Canaan may hardly be considered offspring of the tribe whose genealogy is revealed in Genesis 4. Furthermore, no essential link can be established between commercial transactions and tent dwelling. If anything, city markets rather than isolated tents should be considered the traditional nexuses of commercial transactions.

<sup>29</sup> This problem is debated by North (1964, p. 379) and Hamilton (1990, pp. 189, 222).

<sup>30</sup> Dillmann 1897, p. 201; Hamilton 1990, p. 239.

<sup>31</sup> To resolve this objection, Hamilton (1990, p. 240) suggests: “It is quite possible that this group represents professional cattle-breeders and herders who lived near the city, where they were in charge of the herds of their urban patrons.” This solution remains, however, not only speculative but also extremely restrictive.

<sup>32</sup> *HALOT*, vol. 2, p. 628.

<sup>33</sup> Sawyer 1986, p. 160.

- *Jabal as father of tent makers*: Alternatively, Jabal has been approached as the father of weaving, an activity here illustrated through the fabrication of tents.<sup>34</sup> In such a context, *mīq'neh* is expected to evoke the trade of manufactured fabrics. This interpretation, however, is unlikely for the following reasons: (i) Jabal is called a tent-dweller, not a tent-producer; (ii) tents in ancient times were made not only of fabrics but also of the tanned skins of large mammals, as revealed in regard to the tabernacle (Ex. 26:14; 36:19; 39:24); (iii) weaving was a very ancient, widespread, and non-specialised activity that can hardly be restricted to the Qenite tribe; (vi) weaving was typically practised by women and, as such, is a better candidate for Na'ama-motherhood than for Jabal-fatherhood.

This overview shows that none of the current explanations concerning the meaning of *yōšēb 'ōhel ūmīq'neh* in Gen. 4:20 is satisfying. Therefore, the mention of Jabal in Genesis 4 is probably unrelated to a persona of the forefather of herders, traders, or weavers.

### Jabal's metallurgical activity

As Lamech's firstborn, Jabal has the same status as all his ancestors in the Cain genealogy. This means that Jabal, among Lamech's four children, should be regarded as the main transmitter of the tradition inherited from Cain. This is why one would expect his activity to be closely related to Cain's specialty. The nature of Cain as forefather of the Qenites has led most scholars to identify him as the eponymous ancestor of the south Canaanite metalworkers.<sup>35</sup> This identification is supported by the association of the Qenites and related tribes (Rechabites, Qenizites) with metallurgy (for example, 1 Chr. 4:13–14), their genealogical affinities with the Seirite population of the southeastern mining area of the Arabah, and the use of the Semitic root *qyn* (as well as the closely related roots *qny* and *qn'*) to designate metallurgical operations, in both ancient Hebrew and cognate languages.<sup>36</sup> These considerations suggest the existence of a metallurgical dimension in Jabal's area of specialisation, a premise confirmed by further observations.

### Parallels with Esau genealogy

Important metallurgical activity in Edom/Seir, the land “given” to Esau, promotes homology between his genealogy and that of Cain, the forefather of the Canaanite metalworkers. And commensurate with the antiquity of the Cainite genealogy in Genesis 4, metallurgical activity in the Arabah Valley (the land of Edom/Seir) is known from the early Bronze Age, if not before.<sup>37</sup> This explains the parallels observed between Qenite ancient traditions and some characteristics of Edom's population in the Iron Age. For example, the Qenite nomadic way of life, initiated by

<sup>34</sup> Paul 1996, p. 144.

<sup>35</sup> Von Rad 1968, p. 104; Miller 1974, p. 169; Wyatt 1986; Hamilton 1990, p. 220; McNutt 1990, p. 240; Blenkinsopp 2008, pp. 140–144; Day 2009, p. 337.

<sup>36</sup> Weinfeld 1988; Blenkinsopp 2008, pp. 138, 149; Amzallag and Yona 2017.

<sup>37</sup> Rothenberg 1990; Weisgerber 2003; Grattan *et al.* 2007. This activity improved considerably in the late second millennium BCE (Levy *et al.* 2004; Ben-Yosef *et al.* 2012), the presumed time of the emergence of Israel, Edom, Moab, Ammon, and the Ishmaelite confederation.



Cain (Gen. 4:12, confirmed in Jer. 35:6–10), is echoed in the tent-dwelling way of life of the Edomites, especially those who worked in mining areas.<sup>38</sup> Furthermore, the mark of Cain (Gen. 4:15), expressing closeness to YHWH, is echoed in Esau's inheritance of Mount Seir (Deut. 2:5), the site of YHWH's provenance (Deut. 33:2; Judg. 5:4). These elements suggest that the genealogy of Esau represents a renewal (through the coming of a new population mixing with sons of Seir and inheriting their ancient traditions) of the ancient genealogy and metallurgical traditions symbolised by Cain and his lineage. In this context, it is noteworthy that only two women are called Adah in the Bible: Lamech's first wife (Gen. 4:19) and Esau's first wife (Gen. 36:2); this stresses a parallel between Esau and Lamech and, by extension, between Jabal, the firstborn of Lamech and Adah (Gen. 4:20), and Elipaz, the firstborn of Esau and Adah (Gen. 36:15). Therefore, Jabal's metallurgical aspect is expected from the metallurgical affinities of Elipaz, easily identified through his concubine, Timna (Gen. 36:12), who bears the name of the southernmost copper-mining area in the Arabah.

### *Complementarity of Lamech's lineages*

Lamech is the founder of two sub-lineages, each symbolised by a wife and two children. Professional specialisation is explicitly mentioned for three of these children (Jabal, Jubal, and Tubal-Cain). Although the activity of Zilla's daughter is not mentioned in Genesis 4, it is generally identified as poetry and singing.<sup>39</sup> This skill is deduced from her name, Na'ama, the verb *n'm* in biblical Hebrew meaning *to speak softly, to sing*.<sup>40</sup> It stresses a high level of complementarity between *music*, the activity patronised by Jubal, Adah's second-born, and *song-poetry*, the vocation patronised by Na'ama, second-born of Zilla. Accordingly, we may expect a similar level of affinity between the activities of Jabal and Tubal-Cain, the firstborn of Adah and Zilla, respectively.

Tubal-Cain is typically understood to be a smith. This is revealed by his identification as “the forger (*lōṭēš*) of every artefact (*hōrēš*) of bronze and iron.” (Gen. 4:22). The verb *lš* (= *to sharpen, to forge*) specifically denotes what is done to a piece of solid metal to create its final shape.<sup>41</sup> Such terminology intentionally restricts Tubal-Cain's remit to forging (= shaping raw metal into finished artefacts); that is, smelting (= production of metal from ore) is the task of someone else. Given

<sup>38</sup> Homan 2002, pp. 55–59; Beherec *et al.* 2016. This nomadic tradition apparently predates the foundation of Edom. According to Levy (2008, 2009), the Edomites extended, at least partly, the ethnic identity and way of life of the local nomadic population, which the Egyptians in the late Bronze Age called *Shossu* and which was involved in the mining and smelting of copper.

<sup>39</sup> For example, Dillman 1897, p. 205; Westerman 1984, p. 330; Heidebrecht 1993, p. 156; Alter 1996, p. 20; Blenkinsopp 2011, p. 87. This opinion dates back to Antiquity (Targum Pseudo-Jonathan) and medieval commentaries (for example, Zohar, *Bereshit I*, 19b; III, 55a). See Graves and Patai 1964, pp. 65–69.

<sup>40</sup> See *BDB*, p. 653; *DCH*, vol. 5, pp. 704–705; *HALOT*, vol. 2, p. 705. Alternatively, basing themselves on another meaning of *n'm* (= *to be pleasant with someone, with connotations of charm and sweetness*, see *HALOT*, vol. 2, pp. 705–706), scholars have interpreted Na'ama's name as *the giver of pleasures*, thus deducing that she was a prostitute (Vermeulen 1991, pp. 176, 182) and even the founder of prostitution (Lombaard 2006, p. 151). The general context of the Lamech lineage, however, favours the former interpretation (singing, poetry).

<sup>41</sup> Sawyer (1986, p. 161) even deduces from this restrictive appellation that “[...] Tubal was credited with the discovery of a specific technical process, namely putting a fine edge on metal, to the exclusion of other processes, such as casting it in moulds, for which the term *שטל* would not be used.”

the parallels between the two sub-lineages, Jabal is obviously the best candidate among Lamech's children for producing and purifying the raw metal subsequently worked by Tubal-Cain, his half-brother.

*The twinning of music and metallurgy*

Music and song-poetry are fundamentally associated with metalworking in the southern Levant. This is revealed by the representation, in an Egyptian tomb-painting from Beni-Hassan (early second millennium BCE), of a group of Canaanite-like people who visit Egypt with both their lyres and their bellows and tuyères.<sup>42</sup> At Ugarit, Byblos, and Cyprus, the smith god *Kotar* is frequently paired, and even confounded, with the lyre god *Kinyras*.<sup>43</sup> In ancient Egypt, mining, music, poetry, and dance were patronised together by Hathor.<sup>44</sup> In ancient Crete and Greece, as well, music and dance were closely related to metalworking.<sup>45</sup> The essential link between metallurgy and music is further supported by the use of the root *qyn* in many Semitic languages to designate metallurgy and/or singing.<sup>46</sup>

Thus, fraternal relations between Tubal-Cain, the smith, and Na'ama, the patroness of song-poetry (Gen. 4:22), are not surprising. They are the biblical expression of a common affiliation between musicians and metalworkers, for which there is extensive evidence in the ancient Near East. In parallel, the mention of Jubal as *forefather* of all musicians (Gen. 4:21) is expected to be integrated into a metallurgical context. The only other mention of a forefather from the Lamech genealogy concerns Jabal, so that we may, again, expect him to be deeply involved in metallurgy.<sup>47</sup>

These considerations indicate that Jabal's specialty should not be regarded as herding, trading, or weaving, but as smelting; that is, the production of metal from ore. The singularities of Lamech in the Cain genealogy evoke the division of the society of Canaanite metalworkers into two subgroups: children of Adah, who specialised in metal production, and children of Zilla, who dedicated themselves to transforming raw metals into implements.

<sup>42</sup> Tomb of Chnumhotep II, a royal servant of Amenemhet II. See Shedid 1994, pp. 53–65.

<sup>43</sup> Brown 1965, pp. 197–219; Franklin 2016 (esp. chapters 18–19). The linkage of metallurgy and music, already acknowledged as existing in the Bronze Age, has remained visible recently in traditional societies in the Levant and the Arabian Peninsula. See Albright 1956, p. 98; McNutt 1999, p. 49.

<sup>44</sup> The many votive inscriptions where Hathor is called *the green* (= *copper ore*), the lady of turquoise (*mafek*), “the golden”, or “the mistress of galena”, as well as her temples edified in mining areas, reveal that she patronised mining. See Valbelle and Bonnet 1996, p. 37; Al Ayedi 2007, pp. 23–25. Hathor was also the patroness of choral songs, music and dance. See Budge 1904, p. 435.

<sup>45</sup> Blakely 2007, pp. 5–7; Chinn 2011, p. 87. Exactly as in Genesis 4, the Dactyls are considered in Greece to be the inventors of both metalworking and wind instruments. See Bonnet 1988, p. 386, who mentions Hesiod, Fr 176; Strabo X 3,12; Diodorus Siculus V, 64; Apollinius Rhodius I, 1125; Dionysus of Halicarnassus I, 61,4. In Ancient Greece, the Kabeiroi, considered to be sons of Hephaestus, were the masters of choral singing and of the mysteries accompanying it. See Blakely 2006, pp. 36–38.

<sup>46</sup> Fleischer 2004, p. 18; Amzallag and Yona 2017.

<sup>47</sup> The phonetic similarity of the names of Adah's two sons, Jabal and Jubal, even suggests that, at least at first, metallurgy and music were not practised by separate “brother” corporations, but rather metalworkers specialised in both music and metallurgy.

## The meaning of *mqnh* in Gen. 4:20

### *The metallurgical dimension of mīq<sup>e</sup>neh*

The expression that identifies Jabal as the forefather of everyone “yōšēb ʾōhel ūmīq<sup>e</sup>neh” (in Gen. 4:20) remains obscure as long as *mīq<sup>e</sup>neh* is thought to denote cattle, or even possessions. However, the name Cain, iterated no fewer than 19 times in Genesis 4, and the wordplay between Cain (root *qyn*) and the root *qny* at the very beginning of the chapter (v. 1) together yield an interpretation of *mqnh* in Gen. 4:20 that is more closely related to the metallurgical specialty of the Qenites.

The Semitic root *qny* has a dimension of meaning that evokes metalworking.<sup>48</sup> This is revealed through the metallurgical creation (*qny*) of the heavens and the earth by YHWH (Gen. 14:19, 22).<sup>49</sup> The same root in Prov. 1:5; 15:32 and 19:8 carries the meaning of *to give shape to metal*.<sup>50</sup> In the primary context of *qny*, one would expect the nominative *mīq<sup>e</sup>neh* to be closely related to the shaping of a piece of metal. The simplest working hypothesis, therefore, is that this noun designates metal as a raw material.

Raw metal is not a suitable complement of the *qal yšb* (= *to sit, to dwell*). Exactly as in the interpretation of *mīq<sup>e</sup>neh* as livestock, another verb expressing an action (*to make, to work*) would have to be added in Gen. 4:20b, between ʾōhel and *mīq<sup>e</sup>neh*, to transform Jabal into the forefather of nomadic metalworkers. This solution, which remains as speculative as the meanings previously proposed, should be discarded. In biblical Hebrew, however, *yšb* is not only the *qal* form (sing.) of the verb *yšb* (= *to sit, to dwell*). Vocalized as *yašēb*, it is a conjugate form (hiphʿil) of *nšb*, a root expressing the action of blowing air, exactly as *našāpu* denotes the act of “blowing away” in Akkadian. This verbal form occurs in Ps. 147:18: “He shall send out his word, and shall melt them; shall blow (*yašēb*) his wind, and the waters shall run.” The very same feature is encountered in Prov. 20:26: “A wise king winnows the wicked; he blows (*wayāšēb*) on them with a nozzle (ʾōpān).”<sup>51</sup> The hiphʿil *nšb* is especially apt in signifying the intense blowing of air that characterises metallurgy. Accordingly, the metallurgical meaning of *mīq<sup>e</sup>neh* suggests a double vocalisation of *yšb* in Gen. 4:20, once as *yōšēb* (*qal yšb* = *to sit/to dwell*) with ʾōhel (= tent) as complement, and the other as *yašēb* (hif. *nšb* = *to blow*) with *mīq<sup>e</sup>neh* (= raw metal) as a complement. This leads to the identification of Jabal as *father of those who dwell in tents and blow on [raw] metal*.

### *Other possible readings of mqnh*

Beyond the MT vocalisation, *mqnh* may also be read as *maq<sup>e</sup>neh* (a noun) and as *m<sup>e</sup>qanneh* (piel *qny*). Both possibilities should be examined in the context of Gen. 4:20.

<sup>48</sup> The metallurgical meanings of two closely related roots, *qyn* (= *to melt metal*) and *qnʾ* (= *to recycle metal by re-melting*) suggest that the metallurgical dimension of *qny* is not simply derived from the use of metals for trade. It seems rather that metallurgy was the former semantic field of *qny* in ancient Canaanite idioms and that trade (= *the use of metals for commercial transactions*) emerges as a secondary meaning. See Amzallag and Yona 2017.

<sup>49</sup> Amzallag 2013.

<sup>50</sup> Amzallag and Yona 2017.

<sup>51</sup> Amzallag and Yona 2016.

- The *maq'neh* reading: The noun *maq'neh* is encountered only once in the Bible, in the expression *sēmel haqīn'āh hamaq'neh* (Ezek. 8:3). Since scholarship generally disallows the autonomous existence of such a noun, this term is emended. The obscure denotation of this expression, however, even after all possible emendations, leaves room for another interpretation. In view of the metallurgical meaning of  $\sqrt{qny}$  and  $\sqrt{qn'}$ , the expression *sēmel haqīn'āh hamaq'neh* has been interpreted as evoking the process of *furnace re-melting*, so that *maq'neh* may be interpreted as an archaic designation of the furnace.<sup>52</sup> In Gen. 4:20, the *maq'neh* reading of *mqnh* is rendered possible by a double reading of *yšb* as *to sit/dwell* and as *to blow* (see above). This transforms Jabal into the forefather of those who dwell (*yōšēb*) in a tent and blow (*yāšēb*) on a furnace.
- The *maq'neh* reading: Vocalised as *m'qanneh*, the lexeme *mqnh* is transformed into a verbal form (sing. piel *qny*). Jabal becomes the subject of both *qal yšb* (= to sit, to dwell) and *piel mqnh* (= to shape a piece of metal). This solution obviates the need to introduce a double reading of *yšb*. Accordingly, Jabal becomes the patron/ancestor of those who dwell in a tent and give shape to metal.

#### *Jabal's activity in the context of the Cainite genealogy*

These developments show that each of the three proposed vocalisations of *mqnh* resolves the syntactic problem in Gen. 4:20 with no need to emend or distort the syntax. The integration of Gen. 4:20b into the full context of Lamech's genealogy allows us to assess their respective likelihoods. If vocalised as *m'qanneh*, *mqnh* identifies Jabal as being involved in melting raw metal before it is shaped. The *mīq'neh* (= raw metal) reading also fits this interpretation. Both readings imply a distinction between those who cast the metal (Jabal, v. 20) and those who work it by hammering (Tubal-Cain, v. 22), which did not exist among Canaanite metalworkers.<sup>53</sup> Furthermore, it remains unclear why members of the Jabal group, if specialised in metal-casting, should dwell in tents whereas their metal-hammering colleagues (the Tubal group) do not.

The *maq'neh* reading transforms Jabal into the forefather of the Canaanite smelters. Taking this meaning, the story of the children of Lamech relates the differentiation of the Canaanite metalworkers into two societies, one dwelling in mining areas and being involved in metal production (the Jabal group as smelters) and the other, a society of smiths, living among other populations and producing metallic implements for their purposes (the Tubal group as smiths). Such a dichotomy may explain why it is explicitly mentioned that Jabal lives in a tent (the preferred habitat in the desert mining areas of southern Canaan), whereas such information is missing when it comes to Tubal-Cain, his half-brother, who works among other populations, many of them sedentary. For these reasons, the *maq'neh* vocalisation of *mqnh* should be preferred. It yields the following translation of Gen. 4:20: "Adah bore Jabal; he was the father of everyone who dwells (*yōšēb*) in a tent and blows (*yāšēb*) on a furnace."

<sup>52</sup> Amzallag and Yona 2017.

<sup>53</sup> Alternatively, one may imagine that this distinction reflects the processing of different kinds of metals, because casting was reserved for non-ferrous metals, whereas hammering was the only mode of iron-working in antiquity. This explanation, however, is hard to reconcile with the explicit mention in Gen. 4:22 of Tubal-Cain working both copper and iron.

### Genesis 2–4 as a Qenite myth of origins

The Cain genealogy being distinct from the long genealogy, we may wonder whether it is a literary composition by the author of Genesis, or the importation of a Qenite tradition. This question is now examined.

#### *Cain genealogy and historical memory*

Two elements of historical significance are related in the Cain genealogy. The first is the existence of two steps in the discovery of metallurgy: an archaic process of metal production symbolised by Cain (the first metal producer) and an advanced process that emerged later and is symbolised by Jabal. Jabal's mention as the "father" of every smelter (Gen. 4:20) even suggests that the technique of metal production reached its mature phase, and remained basically unchanged from the time of its first emergence, with Jabal. The second event of a historical nature is the differentiation of the Canaanite metalworkers into two societies, metal producers (sons of Adah) and metal workers (sons of Zilla), by the time metallurgy reached its mature phase (with the birth of Jabal).

These two "events" find an echo in the historical development of metallurgy in the southern Levant. The oldest metallurgical workshops in that region, dating from the second half of the fifth millennium BCE, have been identified in the Beer Sheba valley. Remains of smelting (furnaces and crucibles, ore from the Arabah Valley and other mining areas<sup>54</sup>), metal purification (crucibles) and metalworking (moulds, anvils, hammers) have been detected at these sites.<sup>55</sup> Their conjunction reveals that no specialisation existed among the earliest metalworkers from the southern Levant; that is, metal was produced (from ore) and transformed into artefacts in the same places. This changed at the beginning of the Bronze Age (early fourth millennium BCE), a period characterised by the emergence of a genuine industry, specialising in copper production and purification, in the mining areas of the Arabah Valley.<sup>56</sup> At this time, Beer Sheba, Arad, and many newly emerging cities became centres of production of metallic implements.<sup>57</sup>

In the southern Levant, this specialisation coincides with a profound change in the process of copper production. During the Chalcolithic period, a two-stage process was used. Copper ore was first mixed with charcoal and smelt in a furnace, generating small copper prills that were trapped in slag due to incomplete fusion of silicates in the furnace. The product of such smelting was subsequently crushed and reheated in crucibles in order to melt the prills and separate them from the slag.<sup>58</sup> A mature smelting process emerged later by the addition of appropriate fluxes to the

<sup>54</sup> Weisberger 2003, pp. 80–81.

<sup>55</sup> Rowan and Golden 2009, pp. 41–45.

<sup>56</sup> See Adams 2002; Levy *et al.* 2002. Similar development of the copper production industry is evidenced a short time later in Sinai. See Pfeiffer 2013.

<sup>57</sup> Adams (2003, p. 19) concludes: "Evidence for the increased copper production at Faynan in this period indicates that there was increasing demand for copper and it was likely traded through major 'urban' centres of the region, including the site of Arad, which may have played a dominant role in the east-west copper trade from Faynan to Egypt via the north Sinai overland trade route."

<sup>58</sup> Shugar 2000, pp. 253–254.



furnace. This innovation facilitated the total liquefaction of both metal and silicates, and their separation in the furnace, in the course of the smelting process. Therefore, it reduced the production of copper to a one-step smelting process. This innovation, evidenced from the first half of the fourth millennium BCE, allowed metal to be mass produced in the mining areas. This is probably the source of the differentiation of one group—smelters living in the desert mining areas—from another, metalworkers living in inhabited areas.

These observations suggest that the Cain genealogy carries the memory of the most crucial events in the development of metallurgy in the southern Levant, events that occurred millennia before the Book of Genesis was written. Consequently, it should be regarded as a genuine Qenite tradition rather than an Israelite literary invention or remake.

### *The unity of Genesis 4*

The classical identification of Jabal as the father of nomadic herders (Gen. 4:20) creates an abnormal redundancy in light of the previous mention of Abel, the shepherd (Gen. 4:2). Scholars have cleared up this anomaly by assuming different origins for the story of Cain and Abel (Gen. 4:1–16, the so-called farmer and city-builder tradition) and the Cain genealogy (Gen. 4:17–24, the so-called nomad and metalworker tradition).<sup>59</sup> This premise, however, is unnecessary once Jabal's activity is identified as smelting instead of herding. Furthermore, it makes the entire chapter homogeneous: (i) the birth of Cain (Gen. 4:1) symbolises the emergence of archaic metallurgy; (ii) the story of Cain and Abel (Gen. 4:2–16) relates the change in lifestyle and beliefs stimulated by this discovery; (iii) the generations from Hanokh to Lamech (Gen. 4:17–19) recall the process leading to mature metallurgy; (iv) the mention of Lamech's children (Gen. 4:20–22) reflects the consecutive specialisation of the Canaanite metalworkers into two subgroups: smelters (sons of Adah) and smiths (sons of Zilla), each deeply involved in music and song-poetry. Closing this saga, the song of Lamech (Gen. 4:23–24) is not the apotheosis of ostensibly uncontrolled and criminal violence initiated by Cain, as so frequently assumed.<sup>60</sup> Echoing the mention of Cain's protective mark, it is an expression of solidarity extended to the whole Qenite tribe, notwithstanding their metallurgical or musical activities as well as their segregation into two specialised societies.<sup>61</sup> This cohesiveness of the story related in Gen. 4:1–24 suggests that it should be considered as a wholly Qenite tradition.

<sup>59</sup> See Dillmann 1897, p. 179; Miller 1974, pp. 169–171; Westermann 1984, p. 283; Sawyer 1986, p. 163; Vermeulen 1991, p. 179. Though Robert Pfeiffer (1948, pp. 160–163) identifies an Edomite/Seirite influence in Genesis 4, he assumes a distinct origin for the story of Cain and Abel and for the Cain genealogy. He concludes (p. 162) that “the stories originated in different environments over a considerable area around the Dead Sea, but were apparently collected in Edom [...] the story of Cain and his descendants reflect a Bedouin background, and it is connected artificially with the preceding stories.”

<sup>60</sup> For example, Von Rad 1968, p. 108; Brueggemann 1982, p. 65; Westerman 1984, pp. 336–337; Robinson 1986, pp. 600–602; Rudman 2001, p. 466. Many scholars interpret such an “amplification” of violence as an unavoidable byproduct of the development of civilisation, arts, and techniques symbolised by the sons of Lamech.

<sup>61</sup> The inclusion of all the Qenites in the song of Lamech is revealed, in v. 24, by the parallel between Cain's being avenged seven times and Lamech's being avenged 77 times ( $7 \times 11$ ), 11 being the number of all the individuals (male or female) mentioned in this genealogy, from Cain to Na'ama.

### *The linkage with Genesis 2–3*

The almost identical mentions of the begetting of Adam and Cain (Gen. 4:1, 17) suggest that the story of Adam may be an integral part of the account in Genesis 4.<sup>62</sup> This premise is supported by affinities between the myth of origins in Genesis 2–3 and the story of Cain and Abel (Genesis 4).<sup>63</sup> Among them, several are noteworthy: (i) the similar primary activity (agriculture) of Adam and Cain; (ii) a radical change in existential condition following the transgression of a taboo; (iii) a divine curse following said transgression; (iv) the cessation of farming activities, replaced by wandering; (v) a similar first procreating event immediately following this change in lifestyle. Beyond the parallels in plot, both stories feature similar terminology.<sup>64</sup> These observations suggest that the myth of Adam's expulsion from the Garden of Eden (Gen. 2:4–3:24) and the Cain saga (Gen. 4:1–24) belong to the same tradition and may even be approached as complementary aspects of one single myth. By implication, not only Genesis 4 but the entire text of Gen. 2:4–4:24 should be viewed as the Qenite myth of origin, inserted by the author of Genesis before starting the long genealogy.

### **Relations between the Qenite myth and the long genealogy**

The Israelites are not known as a people specifically involved in metal production, trade in raw metals, or production of metallic items to be exported afar. Cultic metallurgy has no great importance in their worship of YHWH. This is why the insertion of the whole story related in Gen. 2:4–4:24 is not necessary for the development of the long genealogy.

Even more, the insertion of the Qenite myth in general, and the Cain genealogy in particular, at the beginning of Genesis contrasts with the silence of most biblical sources on the Qenites, whose identity is sometimes intentionally concealed and whose relationship with Israel is minimised.<sup>65</sup> Consequently, the Qenite genealogy, positioned as it is even before the long genealogy, is an outlier that was probably not inserted in order to praise the Qenites and their traditions, but rather to serve the ideology developed throughout the long genealogy; that is, the promotion of Israel as the people of YHWH.

### *Cain and Abel as YHWH's first worshippers*

Cain and Abel are the first mortals to make an offering to YHWH (Gen. 4:3–4). Therefore, they should be considered the first worshippers. In Genesis 4, this reality appears to surpass Abel's murder (Gen. 4:8), as evidenced by the Yahwistic mark subsequently given to Cain and all his descendants (Gen. 4:15). Far beyond a simple apotropaic sign, this symbol appears homologous

<sup>62</sup> Bryan 1987, p. 185.

<sup>63</sup> See Riemann 1970; Hauser 1980; van Wolde 1991; Swenson 2006.

<sup>64</sup> Hauser (1980, p. 305), for example, concludes that Genesis 2–3 and Gen. 4:1–16 "... have been written by one highly-skilled writer who has interwoven all major aspects of the two stories so that structurally, linguistically and thematically they form one unit."

<sup>65</sup> For example, the Qenite affiliation of Jethro, Moses' father-in-law, is silenced in Exodus and Numbers and revealed only incidentally in Judg. 1:16. Also the presentation of Saul's request to the Qenites in 1 Sam. 15:6 ("Then Saul said to the Qenites, 'Go, depart; go down from among the Amalekites, lest I destroy you with them. For you showed kindness to all the people of Israel when they came up out of Egypt.' So the Qenites departed from among the Amalekites.") obfuscates the interdiction against attacking them in view of their divine protection (the sign of Cain, Gen. 4:15). It also intentionally ignores the Qenite foundations of Moses' Yahwism, which may be deduced (but are not openly claimed) in Exodus 1–6.

to the one inscribed on the foreheads of the righteous (Ezek. 9:4). In 1 Kgs. 20:41, a (similar) forehead mark serves as a signifier of prophets of YHWH. These indications suggest that the mark evoked in Gen. 4:15 symbolises the closeness of Cain and all the Qenites to YHWH.<sup>66</sup>

This conclusion is supported by the mention of metalworkers who are spontaneously filled with the spirit of YHWH (Ex. 31:1–5, 1Kgs. 7:13–14) and by YHWH's being specifically involved in their activity (Isa. 54:16). Caleb and Othniel, two members of the Qenizite branch of the Qenites, are mentioned as zealous Yahwistic leaders.<sup>67</sup> The Rechabites, a branch of the Qenites who dwell among the Israelites (1 Chr. 2:55), are also mentioned in 2 Kgs. 10:15–16 for their zealous worship of YHWH.<sup>68</sup> In Ex. 4:1–5, Moses is asked to perform a metallurgical wonder as the Israelites and the Egyptians look on (the reversible transformation of a metallurgical item [a sceptre] into liquid metal [a serpent]),<sup>69</sup> to ensure that he is truly speaking in the name of YHWH. In Zech. 2:3–4, metalworkers are even expected to, in the future, liberate Israel, a feature that confirms their status as emissaries of YHWH.

Jethro the Qenite, the father-in-law of Moses and priest of Madian, dwells near Mount Horeb (Ex. 3:1), the famous Yahwistic site (Deut. 5:2, 18:16; 1 Kgs. 19:8) where the god revealed himself to Moses for the first time (Ex. 3:1–2)—a feature suggesting his nature as a priest of YHWH. Scholars have suggested that the Qenites were invested with Yahwistic ritual functions,<sup>70</sup> and furthermore that Israelite Levites were closely related to them.<sup>71</sup> These observations suggest that YHWH was worshipped by the Qenites and that Qenite Yahwism preceded its Israelite counterpart.<sup>72</sup>

### *YHWH and metallurgy*

The first mention of the name *YHWH* in Genesis occurs in Gen. 4:1, in the expression *qānîtt-*et*-YHWH*, associated with the birth of Cain. This coincidence suggests that the emergence of Yahwism is consubstantial with the development of metallurgy. There are some biblical indications to support this assumption, such as the celestial throne of YHWH being described in Ezekiel 1 as a giant furnace,<sup>73</sup> the volcanic theophany and mode of action of YHWH (a feature typically associated with gods of metallurgy in antiquity),<sup>74</sup> the association of divine presence (*kbd*-YHWH) with the radiance emanating from molten metal,<sup>75</sup> and the recycling of rust copper in the furnace as one of YHWH's essential attributes and modes of action.<sup>76</sup> The use of the serpent as YHWH's symbol, traces of which are still apparent in the Bible, also fit into a metallurgical cultic context.<sup>77</sup> YHWH is also the creator of the firmament (*rāqî'a*, literally, a *hammered*

<sup>66</sup> See Blenkinsopp 2008, pp. 141–142; Chung 2011, pp. 250–251 and ref. therein.

<sup>67</sup> Num. 13:30, 14:24; Josh. 14:13–14; Judg. 3:9.

<sup>68</sup> See Weinfeld 1987, p. 311; McNutt 1995, p. 117; Mondriaan 2011, pp. 418–419. In Jeremiah 35, the Rechabites are praised by Jeremiah for their zealous worship of YHWH, which explicitly differs, in its taboos, from the Israelite traditions.

<sup>69</sup> See Amzallag 2015a, pp. 244–245.

<sup>70</sup> Mazar 1965; Cross 1973, pp. 201–202; Halpern 1992, pp. 19–20.

<sup>71</sup> Cross 1973, p. 206; McNutt 1995, p. 122. This assumption is confirmed by the casting of the golden calf by Aaron himself (Ex. 32:4) and by Moses' making the copper serpent by himself (Num. 21:8).

<sup>72</sup> See Blenkinsopp 2008; Mondriaan 2010, pp. 331–352; Römer 2015, pp. 312–314.

<sup>73</sup> Driver 1951; Amzallag 2013, pp. 164–166.

<sup>74</sup> Amzallag 2014.

<sup>75</sup> Amzallag 2015b.

<sup>76</sup> Amzallag 2015a.

<sup>77</sup> Amzallag 2016.

*piece of metal*), indicating his involvement not only in smelting but also in metalworking.<sup>78</sup> Nevertheless, his theophany and essential attributes, as mentioned above, mainly belong to the sphere of smelting. This suggests affinities with production rather than transformation of metal. Further observations support this assumption:

- *Tent worship*: Exactly like Jabal in Gen. 4:20, YHWH's glory resides in a tent, not in a temple. This singularity is specified in the Bible through the very detailed description of the cult of YHWH in a tabernacle (Exodus 25–32), in contrast to the absence of divine instructions concerning construction of the Israelite temples, even the one in Jerusalem. A denial of YHWH's cult in temples is even explicitly formulated in 2 Sam. 7:5–7.<sup>79</sup>
- *Domain of residence*: The casting and forging of copper implements has been well evidenced in Canaanite cities since the Bronze Age (for example, Meggido, Tel Dan, Beer Sheba, Arad) and metallurgical activity has been demonstrated in the temples of some of them.<sup>80</sup> Nevertheless, YHWH is not mentioned in the Bible as having dwelled in any city before his cult in Jerusalem. This contrasts with the specific mention of his residence in the Arabah Valley (Seir, Paran) and Sinai (Deut. 33:2, Judg. 5:4, Hab. 3:3), areas known in antiquity for their importance in the production of copper.<sup>81</sup>
- *YHWH's emissary*: Many biblical sources acknowledge the existence of a divine being that speaks and acts in the name of YHWH, which they call the Emissary of YHWH (*mal'āk-YHWH*).<sup>82</sup> The proximity of the two creates such confusion that the Emissary, when addressing a mortal, is frequently called YHWH himself in the Bible.<sup>83</sup> The Emissary's attributes and modes of action reveal affinities with Kothar, the Ugaritic smith god, and his Tyrian counterpart, Melqart.<sup>84</sup> These findings suggest that YHWH should be first of all identified with smelting, forging being essentially reserved for his Emissary.

These considerations suggest that the segregation between the sons of Adah and of Zilla in the Cain genealogy finds a celestial counterpart in the claim that YHWH, the powerful and distant deity dwells in a tent, originates from mining areas, and reveals himself through the smelting process, and through his Emissary, the smith god who patronises metalworkers and is honoured in cities and temples.<sup>85</sup>

<sup>78</sup> See Gen. 1:7; Pss. 19:2; 136:5–6.

<sup>79</sup> Later in this oracle (2 Sam. 7:13), the construction of a temple in Jerusalem is authorised. However, it is explicitly devoted to honouring the *name* of YHWH, but not the deity himself.

<sup>80</sup> Reviewed by Bendov 2011, pp. 87–91.

<sup>81</sup> In the Arabah, the amount of slag produced between the fourth and first millennia BCE is estimated as 100,000 tons in the Punon (Feynan) area (Bartlett 1989, p. 36, Levy *et al.* 2004, p. 867) and about 10,000 tons at Timna (Erez ben Yosef, personal communication). Concerning Sinai, the amount of 100,000 tons of slag has been estimated at Bir Nasib, in the copper mining district of Serabit el Khadim (Rothenberg 1987, p. 4) in activity from the fourth millennium BCE onward.

<sup>82</sup> White 1999; Paul 2007.

<sup>83</sup> In Genesis 18, for example, the term YHWH is used in reference to the “master of the earth and heavens” in verses 14 and 19, to his emissary in verses 1, 13, 26, and 33, and to one or the other—it is not possible to tell which—in verses 17 and 20.

<sup>84</sup> Amzallag 2012.

<sup>85</sup> Homologies have been identified between Kothar, the Ugaritic smith god and emissary of El, and other patron deities such as Ea, Ptah, and Daidalos. See McNutt 1990, pp. 231–233; Morris 1992, pp. 85, 93. This homology is confirmed

## Discussion

### *Genesis 4 and the memory of ancient historical events*

Most modern scholars approach the Cain genealogy as a text evoking the development of civilisation in the ancient Near East, from agriculture and herding, to the foundation of cities and the development of arts and crafts. However, the present observations invite revisiting these conclusions. An approach to Genesis 4 avoiding emendations and extrapolations indicates that this text in no way evokes the origin of agriculture or herding. It rather focuses almost exclusively on the development of metallurgy in the southern Levant. Instead of a public mythology about the origin of civilisation, it appears to be instead a story specifically about the small congregation of Canaanite metalworkers, recalling that community's origin, its singularity (Yahwism, music and poetry, nomadic way of life), the specialisation into two groups (smelters and smiths) and the solidarity of the whole congregation, which transcended this craft specialisation.

The only element which is not easily integrated into this scheme is the mention of Cain as the first city-founder (Gen. 4:17). However, it seems that the foundation and development of the first cities was intimately related to metalworking in the ancient Near East. In south Canaan, many cities from the Early Bronze Age apparently emerged and developed in close relation to the trade and transformation of the copper produced in the Arabah valley and its export to Egypt.<sup>86</sup> Also in Egypt, Bouto and Maadi, the first predynastic cities, emerged in close relation to metallurgy,<sup>87</sup> and Memphis, the first royal city, was patronised by Ptah, the Egyptian smith god. Similarly, in Mesopotamia, four of the five earliest (antediluvian) cities were apparently related to copper metallurgy: Eridu was the city of Enki, the crafty god and divine copper worker; Bad Tibira, is literally "the fortress of the metalworkers." Sippar, the name of the third town, apparently means "City of bronze" and Shuruppak was patronised from its origin by Ea, the Akkadian smith god.<sup>88</sup> It seems, therefore, that many of the first cities emerged as sites of metallurgy.<sup>89</sup>

These observations suggest that the Cain genealogy truly includes elements of central importance in the development of ancient Near Eastern civilisations. It also probably reflects the status of metalworkers and of their gods as civilising heroes.<sup>90</sup> In Genesis 4, however, these elements are not central points of a narrative/genealogical pattern relating to the birth of civilisation. Rather,

by their relationship with Iron Age smith gods such as Hephaestus and Melqart; see Morris 1992, pp. 10–11, 77, 84; Bonnet 1988, pp. 80, 200; Blakely 2006, p. 44.

<sup>86</sup> Ward 1991, pp. 16–17; Gophna and Milevski 2003; Kerner 2010, p. 191.

<sup>87</sup> Caneva *et al.* 1987; Ward 1991, p. 18.

<sup>88</sup> Hallo 1970. Though Sumerian myths are known mainly from the third–second millennium BCE, many scholars (for example, Howard-Carter 1981, p. 217) assume that they (partly) reflect historical features associated with the emergence of the Sumerian civilisation in the early fourth millennium BCE.

<sup>89</sup> It is even likely that their foundation reflected the wish, for the metalworkers, to separate and even isolate themselves from the surrounding population.

<sup>90</sup> Enki, the Sumerian patron of metal crafts, was praised as the creator of mankind, the organiser of the universe, and the promoter of civilisation (Jacobsen 1981, pp. 513–529; Kramer and Maier 1989, pp. 38–56; Averbek 2003, pp. 757–762). Ptah, his Egyptian counterpart, was endowed with similar characteristics (Budge 1904, pp. 500–502; Brandon 1963, p. 42; Finnestad 1976, pp. 83, 93). The patron of metallurgy was honoured with similar prestige in Minoan Crete, where the great deity is identified with Welkhanos, the master-god of the arts of fire (Willetts 1962, p. 250; Capdeville 1995, pp. 167, 178, 191).



all are integrated into another perspective, which relates to the origin of the organisation of the congregation of metalworkers. It seems, therefore, that the Cain genealogy and the myth recounted in Gen. 2:4–4:24 are very ancient traditions of Qenite origin that were not expected, at their origin, to be diffused beyond the small circle of Canaanite metalworkers.

Many scholars assumed in the past that the genealogy in Genesis 4 was borrowed from the Sumerian tradition of seven generations of antediluvian sages, the *Apkallu*.<sup>91</sup> The striking parallels between the Hebrew and Sumerian traditions do promote the assumption of a cultural linkage between them. The identification of Genesis 4 as an old Qenite tradition, however, suggests that such a cultural linkage, if it truly exists, is much more ancient than the redaction of the Book of Genesis.<sup>92</sup> Instead, it reflects the memory of the importance of metallurgy and metalworkers in Bronze Age Levantine and Mesopotamian societies.

### *The esoteric dimension of Genesis 4*

The present investigation reveals that Genesis 4 preserves the memory of important events relating to the development of metallurgy in the southern Levant. Beyond this particular historical perspective, however, the text also evokes the existence of a Qenite form of Yahwism. Yet the story is told in a surprising way. A distancing and admonishment by YHWH is related first (Gen. 4:5–7), whereas the application of the mark of Cain (Gen. 4:15) subsequently reveals an improved degree of closeness to the deity. Curiously, however, the only significant event between the birth of Cain and the mark of closeness to YHWH is the assassination of Abel by Cain and its consequences (vv. 8–11). This evidence ostensibly challenges the identification, in Genesis 4, of traces of a pre-Israelite Yahwism among the Qenites.

However, the identification of a primeval murder in the mythology attached to the Kabeiroi, the congregation of north Aegean metalworkers, suggests that the significance of Abel's death may be much more complex than is generally assumed.<sup>93</sup> The identification of one of the murderers in the Kabeiroi tale with Prometheus indicates that this drama concerns the *first* metalworker, exactly as Cain is described in Genesis 4.<sup>94</sup> The positive character attributed in ancient Greece to both Prometheus and the Kabeiroi leaves few doubts that this primeval murder has a positive significance.

In both Samothrace and Lemnos, this event was treated as the founding event of the *mysteria*, festivals of an initiatory nature through which the metalworkers' enigmatic deity revealed itself

<sup>91</sup> See, for example, Finkelstein 1963, p. 50; Hallo 1970, pp. 63–64; Wilson 1977, pp. 149–165. This premise is suggested by the fact that Oannes, the first Apkallu, is also regarded by the Sumerians as the father of arts and crafts and the first city builder. Furthermore, exactly as with the parallel in names between Genesis 4 and 5, the two antediluvian Sumerian genealogies (the seven Apkallu and the ten kings) display many affinities in regard to names; this parallel is, however, challenged by some authors (for example, Davila 1995).

<sup>92</sup> The impressive memory of ancient events among metalworkers is revealed by the striking parallels existing between metallurgical traditions from Iron Age Greece and from traditional societies in Africa (see Blakely 2006). Eliade (1962) confirmed such parallels between metallurgical traditions from societies distant in both space and time.

<sup>93</sup> Blakely 2007; 2012; Bremmer 2014, pp. 42–48.

<sup>94</sup> Though the identity of the Kabeiroi remains obscure, Pausanias (9.25.5–6) reveals that the first of them were Prometheus and his son Aitnaos. See Bowden 2015, p. 35. Concerning the parallels between Cain in Genesis 4 and Prometheus, see Sawyer 1986.

to the participants.<sup>95</sup> This means that, exactly as in Genesis 4, the commemoration of this “primeval murder” was an event of positive value that was expected to introduce a new dimension of the deity’s revelation and nearness. This singular feature is clarified when one remembers that initiatory processes (such as those characterising the *mysteria* in the northern Aegean) generally begin with a death-like event of symbolic nature, which becomes a prerequisite for the revelation of a new and theretofore hidden reality concerning the sacred.<sup>96</sup>

Several elements argue in favour of the relevancy of such an interpretation in Genesis 4. The first is the mention of a phase of wandering immediately after the murder (Gen. 4:14), the typical consequence of the death-like act that sets the initiation process in motion. The second is the account of the seven generations between Cain and Lamech, a number that invites us to interpret these “begats” not only from a genealogical perspective, but also as a dynamic that carries a maturation process to its completion.<sup>97</sup> The third and perhaps the clearest evidence is the change in the relationship with YHWH after Abel’s murder, revealed by Cain’s declaration in v. 14 (“from your face I shall be hidden” [*ûmippānêkâ ’essātēr*]), alluding to the renunciation of all official worship of the deity, and the compensation represented by the imprint of a visible mark on Cain, signalling him as a beneficiary of YHWH’s protection (v. 15). This succession of statements denotes the transformation, following Abel’s death, of Cain’s erstwhile direct but unsuccessful relationship with YHWH (Gen. 4:6–7) into a new connection of secret and mysterious nature.<sup>98</sup> In ancient Greece, the very same veil of secrecy conceals the nature, attributes, representation, and even name of the divine beings who were worshipped in the *mysteria* of metallurgical origin.<sup>99</sup> More generally, secrecy is the most important characteristic of initiatory processes in ancient and traditional societies.

These observations suggest that the story of Cain and his descendants, recounted in Genesis 4, has affinities with the initiatory process that brings to partial revelation the mysterious deity associated with the Kabeiroi. The probable Levantine origin of these Greek daimones suggests that the parallels between the two traditions are not coincidental.<sup>100</sup> Rather, they attest to an initiatory mode of revelation and transmission of Qenite worship of YHWH.

<sup>95</sup> According to Clement of Alexandria (*Protreptikos* II, 15), the founding event in the Kabeiroi mysteries in Samothrace was a drama in which two brothers killed a third, buried him, and then celebrated this event. This testimony is confirmed by Julius Firmicus Maternus (*De Errore Profanarum Religionum* 10.11), who recounts a similar drama integrated into Kabeiroi ceremonies that were performed on Mount Olympus. See Blakely 2013, p. 170.

<sup>96</sup> Eliade 1987, pp. 226–227.

<sup>97</sup> This is confirmed by the count of seven in Lamech—his two wives, and their four children; the 77 people evoked in the Cain account; and the insertion of the numbers seven and 77 in Lamech’s brief song. This initiatory dimension may explain why, in contrast to the lengthy genealogy, no lifespan is attached to any member of Cain’s descent.

<sup>98</sup> Such a secret cult of YHWH is evoked, for example, in Isa. 45:15: “Truly, you are a God who hides himself (*miš’nuṭtēr*), O God of Israel, the Savior.” See also Isa. 8:17; 45:15; 143:7; Prov. 25:2.

<sup>99</sup> This anonymity is confirmed by the names given to the divine entities celebrated in the *mysteria*, in dedications: “gods,” “great gods,” or “gods of Samothrace.” Bowden (2015, p. 34) concludes, “This would indicate that the identity of the gods was not revealed even during initiation into their cult, nor to initiates afterwards.” Bremmer (2014, p. 34) remarks similarly, “The anonymity is probably to be explained by the special character of the Mysteries and its ritual. [...] It is striking how often the Greeks and Romans tried to replace their anonymity with a specific name [...]”

<sup>100</sup> The Levantine origin of the Kabeiroi has long been suggested due to the absence of a convincing Indo-European etymology and in view of reference to their powerful nature and appellation *megaloi theoi* through the use of the Semitic root *kbr*. It is confirmed by the coincidence between the Kabeiroi cultic sites and the venues of Levantine metalworkers and/or the metal trading routes of the Levantines (Morris 1992, p. 146; Blakely 2013, pp. 163–164). The importance of

These considerations indicate that, beyond the historical components identified in Genesis 4, both the drama of Cain and Abel and the subsequent succession of generations should also be approached as markers of successive elements of an initiatory process that finally leads to an esoteric knowledge distinct from the Israelites' overt worship of YHWH.

*Possible motivations for the inclusion of Cain's genealogy in Genesis*

As shown here, the Cain genealogy evokes not only the origin of metallurgy but also its bonds with early Yahwism in the fifth to the fourth millennium BCE. This association is arguably the reason why the Cain genealogy (and probably also the myth of Eden) was introduced in Genesis before the long genealogy. These considerations reveal a first possible motivation for inserting the Cain genealogy in such a prominent position in Genesis: mentioning the primeval cult of YHWH is required in an opus that attempts to link the genealogy of the sons of Jacob to the time of origins. This rationale may even justify the importation of the entire Qenite myth of creation (Gen. 2:4–4:24) before the development of the long genealogy. If this were the only motivation, we would expect the Cain genealogy to be exposed as the foundation of the long genealogy, instead of the generations between Seth and Lamech, as developed in Genesis 5. But this is not the case. The Cain lineage is not accounted for in Genesis as the foundation of the long genealogy, as one would expect if the new people of YHWH (Israel) were approached as continuous from the ancient ones (the Qenites). Even more, the reuse, in Genesis 5, of almost all the names of the Cain genealogy suggests that the exclusion of the Cain lineage from the long genealogy is an *intentional* modification of an original genealogy of Canaanite peoples that regards the Qenites as their prestigious ancestors. This reuse deprives the long genealogy of the prestige of the Cain lineage, the first worshippers of YHWH; however, it allows the Israelites to claim their status as YHWH's people *independently* of the Qenites, their traditions, and their beliefs. This point may have been of special importance at the time Qenites dwelled among the Israelites, because it allowed the new (Israelite) worship to differentiate itself clearly from the old one. It also serves as justification for the Israelites' radical novelty: the transformation of YHWH from an esoteric god into a national deity, officially and publically worshipped, a switch explicitly captured in Deut. 29:28: "The secret things (*hannis<sup>e</sup>ttārôt*) belong to YHWH our God, but the revealed things (*hannig<sup>e</sup>lôt*) belong to us and to our children forever, that we may do all the words of this Torah."<sup>101</sup>

Therefore, the early positioning of the Cain genealogy and its separation from the long genealogy should be treated as a powerful means of underlining the archaism of Qenite Yahwism and convincing the reader of its utter irrelevancy in the new world emerging after the "flood", delegitimising ancient Yahwism and replacing the Qenites with a *new* people of YHWH, the sons of Jacob.

the cult of the Kabeirot in Thebai, the city founded by Cadmos the Tyrian, also supports their Levantine origin. See Blakely 2013.

<sup>101</sup> Such an esoteric character of Qenite Yahwism may explain why evidence of a cult of YHWH among metalworkers from the southern Levant and Sinai is so difficult to detect; it also contrasts with the abundance of Yahwistic theophoric names among the Israelites.

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# The Discourse Particle *'ammā* in the Qur'ān

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## Abstract

In traditional Arabic linguistic thought, four functions of the particle *'ammā* are mentioned: first, a conditional particle or a particle semantically denoting condition; second, *ḥarfū btidā* "particle indicating the start of a new speech"; third, *ḥarfū tafṣīl* "particle indicating elaboration" and fourth, *ḥarfū tawkīd* "particle denoting emphasis." The Western research literature classifies *'ammā* – *fā* as a topicalisation structure, where *'ammā* establishes a specific component as a topic placed in a front position in the clause. This article shows that *'ammā* mostly serves as a discourse particle, contributing to the coherence of the text by establishing various logical-semantic relations between the parts of the discourse unit. Only in one case is no relation indicated, and *'ammā* marks a shift in topic. The first of this article's three sections provides definitions of the classical Arab grammarians and Western scholars for the particle *'ammā*. The second section defines the term discourse particle and shows how these particles are approached in cohesive-based study. The third part offers an analysis of representative Qur'ānic examples in which *'ammā* is introduced.

## 1. Introduction

### 1.1. *The Structure of 'ammā – fā in Traditional Arabic Linguistic Thought*

The grammarians distinguish four functions of the particle *'ammā*:

a. Sibawayhi presents the following examples: *laqītu zaydan wa-'ammā 'amrun fa-qad marartu bihi* "I met Zayd and as for 'Amr I passed on him" and *laqītu zaydan wa-'idā 'abdullāhi yadribuhu 'amrun* "I met Zayd and all of a sudden 'Abdullāh — 'Amr struck him." Both particles (*'ammā* and *'idā*) function as *ḥurūf al-ibtidā* "particles indicating the start of a new speech," therefore both clauses (the one that precedes one of these particles and the one that follows it) are syntactically and semantically independent; that is, each clause can stand alone as a sentence.<sup>1</sup>

b. According to Mubarrad, *'ammā* encodes the meaning of *ḡazā*<sup>2</sup> "requital, compensation," while clauses such as *'ammā zaydun fa-lahu dirhamun* "as for Zayd, he has a dirham" or *'ammā zaydun fa-'aṭīhi dirhaman* "as for Zayd, give him a dirham" should be reconstructed as *mahmā*

<sup>1</sup> Sibawayhi 1980, vol. 1, p. 95. See also: Rummānī 1986, p. 129; 'Uḍayma 1972, vol. 1, pp. 328–330.

<sup>2</sup> Sadan explains the term *ḡazā* as follows: "The term *jazā*' literally means 'requital, compensation'. In the grammatical context it denotes the utterance that follows the conditional sentence, i.e., the apodosis. The protasis and apodosis are called *al-ṣarṭ wal-jazā*'. However, as Carter and Levin note, by the time of Sibawayhi and al-Mubarrad the technical term *jazā*' may already have come to denote not only the apodosis but a full conditional clause; that is, a protasis and an apodosis." See Sadan 2012, pp. 310–311.

*yakun min šay'in fa-'a'ṭi zaydan dirhaman* “whatever the case may be, give Zayd a dirham.” Mubarrad also mentions that this structure exhibits a case of *taqdīm wa-ta'hīr* “preposing and postposing” because when saying *'ammā zaydun fa-ḍrib* “as for Zayd — strike [him],” the verb *ḍrib* may not be preposed because the particle *'ammā* has the meaning of *mahmā yakun min šay'in*,<sup>3</sup> a statement which already contains a verb (*yakun*). Therefore *'ammā* can be followed only by a noun, while the verb must be positioned after the particle *fa*,<sup>4</sup> which starts the apodosis of a conditional sentence.<sup>5</sup> Additional examples presented by Mubarrad are: *'ammā yawma l-ḡum'ati fa-'innaka murtaḥilun* “as for Friday — you [will] travel [lit. you are traveller],” a sentence that might be reconstructed as *mahmā yakun min šay'in fa-'innaka murtaḥilun yawma l-ḡum'ati* “whatever the case may be, you will travel on Friday.” The verse *'ammā l-yatīma fa-lā taqḥar* Q 93:9 “as for the orphan, do not oppress him” can be understood as *mahmā yakun min šay'in fa-hādā l-'amru fihi* “whatever the case may be, this is the order/instruction regarding the orphan.”<sup>6</sup>

'Astrābādī also says that the particle *'ammā* has the meaning of condition, or, more precisely, it has the meaning of the conditional particle *'in* “if.” Thus the sentence *'ammā zaydun fa-qā'imun* “as for Zayd, he is standing” means *'in yaqa' fi d-dunyā šay'un yaqa' qiyāmu zaydin* “if something happens in this world, the standing of Zayd will happen/will be accomplished.” Furthermore, in this sentence there is a relation of *'istilzām* “necessity,” that is, the protasis (*aš-šarṭ*), which 'Astrābādī calls *al-malzūm* “the obligated,” requires its apodosis (*al-ḡawāb*) for the sentence to be semantically correct; however, the protasis, which is *'in yakun min šay'in/in yaqa' šay'un* “if the case is,” was deleted for *tabḥīfu l-kalām* “lightening of the speech” and the noun Zayd replaced the deleted protasis.<sup>7</sup> Since there is a relation of *'istilzām* “necessity” between the protasis and the apodosis, the clauses followed by the particle *'ammā* and *fa*- may not be syntactically and semantically complete clauses (*ḡumlatun tammatun*), for example, *\*'ammā zaydun qā'imun fa-'amrun ka-dālīka* “as for Zayd, he is standing, and 'Amr also [stands].”<sup>8</sup>

<sup>3</sup> According to Mālaqī, *'ammā* has only the meaning of *mahmā* and it does not govern as the conditional particle *mahmā* governs the components that follow it. In addition, *'ammā* has the meaning of *tafṣīl* “detailing”, “elaborateness.” The particle *fa*- is introduced before the apodosis of *'ammā* just as it is introduced before the apodosis in a regular condition sentence. The reason is that *'ammā* has the same meaning as the conditional particle *mahmā*. See Mālaqī 1985, p. 181.

<sup>4</sup> The deletion of this particle is allowed due to poetic license (*ḍarūratu š-šī'r*). For example, *'ammā l-qitālu lā qitāla ladaykum wa-lākinna sayran fi 'irāḍi l-mawākibi* “as for the fight, there is no fight among you but journey/walk toward a group of riders and walkers.” See Mubarrad 1994, vol. 2, p. 71. See also 'Astrābādī 1998, vol. 4, p. 507; Ibn Hišām 1969, vol. 1, p. 58; Ibn Hišām 1971, vol. 4, p. 234; Suyūṭī 1989, vol. 4, p. 356; 'Uḍayma 1972, vol. 1, p. 332.

<sup>5</sup> Mubarrad 1994, vol. 3, p. 27. See also 'Astrābādī 1998, vol. 4, p. 506. He mentions that according to Sibawayhi *'ammā* has the meaning of the conditional particle *mahmā*; Mālaqī 1985, p. 181; 'Uḍayma 1972, vol. 1, p. 331.

<sup>6</sup> Mubarrad 1994, vol. 2, pp. 354–355. The same examples are presented by 'Astrābādī (1998, vol. 4, p. 505) as cases in which syntactic components that should be positioned in the apodosis together with their *'amil*, are preposed; thus the verse *'ammā l-yatīma fa-lā taqḥar* (Q 93:9), where the direct object *al-yatīma* is preposed, should be reconstructed as *'ammā yakun min šay'in fa-lā taqḥari l-yatīma* “if something will happen, do not oppress the orphan.” See also Suyūṭī 1989, vol. 4, p. 358; Harawī 1981, p. 145; Zarkašī 1957, vol. 4, p. 242.

Regarding the example *'ammā yawma l-ḡum'ati fa-'innaka murtaḥilun*, Ibn Hišām comments that Sibawayhi, in contrast to Mubarrad, says that it would be incorrect to say that the governor of the adverb denoting time is positioned after *fa*, because it is not allowed to prepose the governed element of *ḥabar inna*. See Ibn Hišām 1969, vol. 1, p. 60.

<sup>7</sup> 'Astrābādī 1998, vol. 4, p. 505.

<sup>8</sup> 'Astrābādī 1998, vol. 4, p. 507.

Suyūṭī, like the others, also argues that *'ammā* is not a conditional particle, but only has the meaning of such a particle. He explains that in a regular conditional sentence the apodosis is dependent on the protasis (*law kānat šarṭan la-kāna mā ba'dahā mutawaqqafan 'alayhā*), as in *'in qāma zaydun qāma 'amrun* “if Zayd stands up, ‘Amr will stand up too,” where the standing of ‘Amr is dependent on the standing of Zayd; that is, the standing will occur only if Zayd stands up. However, in a clause starting with *'ammā*, such a relation of dependency does not exist.<sup>9</sup>

Thus, according to the Arab grammarians *'ammā* is not a conditional particle but has the meaning of such a particle; however, according to the Kūfa school, *'ammā* actually consists of the conditional particle *'in*, to which *mā* is suffixed because the protasis is deleted.<sup>10</sup> Furthermore, Ibn Hišām explicitly states that *'ammā* is a conditional particle, as proven by the requirement of the particle *fa-*, which is considered to be *fā' al-ğazā'* “compensation *fā'*” and not *fā' al-'atf* “the connective *fā'*” or *fā' az-zā'ida* “the superfluous *fā'*.”<sup>11</sup>

c. *'ammā* encodes *tafṣīl* “detailing,” “elaboration,” for example, *ğā'anī 'ihwatuka fa-'ammā zaydun fa-'akramtuhu wa-'ammā 'amrun fa-'ahantuhu wa-'ammā ġa'farun fa-'a'radtu 'anhu* “your brothers came to me, as for Zayd – I respected him, and as for ‘Amr – I despised him, and as for Ġa'far – I avoided him.”<sup>12</sup>

d. *'ammā* may function as *ḥarfū tawkid* “emphasising particle.” If one considers a sentence such as *zaydun dāhibun* “Zayd is walking,” and intends to indicate that there is no doubt that Zayd is walking or that Zayd is determined to walk, then one should say *'ammā zaydun fa-dāhibun* “as for Zayd, he is walking/will walk.”<sup>13</sup>

*'ammā* is usually followed by a noun in the nominative because it functions as the subject of the sentence, and what follows the particle *fa* functions as its predicate.<sup>14</sup> However, Sibawayhi and other grammarians discuss a structure in which *'ammā* is followed by a verbal noun in the accusative, for example, *'ammā 'ilman fa-'ālimun* “as for the state of learning, [whoever is found in this state] is learned.” This translation is offered in accordance with Sibawayhi's explanation, namely that according to al-Ḥalīl, the sentence given above means *'anta r-rağulu fī ḥādā l-ḥālī* “you are the man in a state of learning.” The verbal noun following *'ammā* is considered a *ḥāl* “circumstantial phrase”; however, if this verbal noun becomes definite by prefixing of the definite article *al-*, it should be in the nominative case rather than the accusative, because it no longer functions as *ḥāl*. Furthermore, Sibawayhi mentions that sometimes there are two options of vocalising the verbal noun: the first is in the nominative case, for example, *'ammā l-'ilmu fa-'ālimun bi-l-'ilmi*, which might be paraphrased as *'ammā l-'ilmu fa-'ālimun bihi*, hence translated as “as for the knowledge — he knows it (he possesses this knowledge)”; this, according to Sibawayhi, is because the second verbal noun (*bi-l-'ilmi*) refers to the first verbal noun. The second option is *'ammā l-'ilma fa-'ālimun bi-l-'ilmi*; in this case the second verbal noun does not

<sup>9</sup> Suyūṭī 1989, vol. 4, p. 355.

<sup>10</sup> 'Astrābādī 1998, vol. 4, p. 506.

<sup>11</sup> Ibn Hišām 1969, vol. 1, p. 57; 1971, vol. 4, p. 232.

<sup>12</sup> Rummānī 1986, p. 129. See also 'Astrābādī 1998, vol. 4, p. 504; Ibn Hišām 1969, vol. 1, p. 58; Suyūṭī 1989, vol. 4,

p. 357.

<sup>13</sup> Ibn Hišām 1969, vol. 1, p. 59; 1971, vol. 4, p. 233. See also: Suyūṭī 1989, vol. 4, p. 357; Zarkašī 1957, vol. 4, p. 242.

<sup>14</sup> Harawī 1981, p. 144.

refer to the first, therefore it is paraphrased by Sibawayhi as *'ammā l-'ilma fa-'ālimun bi-l-'ašyā'i* “as for the knowledge — he knows different things.”<sup>15</sup>

### 1.2. *The Structure of 'ammā – fa in Western Descriptions*

I start this review with Reckendorf, who mentions the structure of *'ammā – fa* in the chapter entitled *Isolierung des natürlichen Subjekts* “the isolation of the natural/real subject.” Reckendorf explains that through the use of *'ammā* the subject is preposed, while this particle has no effect on the case mark of the subject. The predicate is placed after the particle *fa*, for example, *'ammā 'anta fa-lam tuṣalli* “as for you, you did not pray.”<sup>16</sup>

Beeston says that *'ammā* prefixed to a theme gives it a certain degree of emphasis, and it can be equated with the English *as for*; for example, *'ammā hādā fa-ša'bun* “as for this, it is difficult.”<sup>17</sup>

Badawi, Carter and Gully mention that the *'ammā – fa* structure is a type of topicalisation structure in Arabic. *'ammā* is normally followed by a noun phrase presented with some emphasis as the topic, followed by a comment introduced by the particle *fa*. There are various types of comment, while the comment clause will itself be composed of topic-comment, as in *'ammā l-ḥamru fa-tā'tīruhā 'alā l-'aqli lā yaḥtāḡu 'ilā l-bayāni* “as for the wine, its effect [topic] on the mind needs no explanation [comment].”<sup>18</sup> Dahlgren also classifies *'ammā – fa* as one type of the topicalisation structures, saying that to activate an unused topic, both classical Arabic and Modern Standard Arabic employ a construction with *'ammā – fa*.<sup>19</sup>

According to Khan, “SV clauses in which the initial nominal is introduced by *'ammā* and connected to the rest of the clause by *fa* are restricted to marking a shift in topic. They do not mark boundaries of spans on other dimensions of the discourse. In general, *'ammā*-clauses constitute a more powerful topic-shifting device than other types of Extraposition/SV clauses and are characteristically used to draw attention to major shifts in topic.”<sup>20</sup>

#### 1.2.1. A definition of the terms topic and topicalisation

In the Western literature *'ammā – fa* is considered a case of topicalisation but the term *topic* is employed throughout this article; therefore I find that the two terms need clarification. *Topic* and *topicalisation* are related to *information structure* — a term not concerned with the lexical and propositional content of the discourse but with the way such discourse is organised and transmitted. *Information structure* considers the speaker's hypotheses about the listener's mental state, but it

<sup>15</sup> Sibawayhi 1980, vol. 1, pp. 384–385. See also 'Astrābādī 1998, vol. 4, p. 508; Ibn Hišām 1969, vol. 1, p. 61. Both 'Astrābādī and Ibn Hišām say that the verbal noun in *'ammā l-'ilma fa-'ālimun* is in the accusative because it functions as *maf'ul lahu* and the sentence means *mahmā yudkar zaydun li-'aḡli l-'ilmi fa-huwa 'ālimun* “whenever Zayd is being mentioned because of his knowledge, then he [is regarded as] a knowing/learned man.” Or it may function as *maf'ul muṭlaq* governed by the active participle *'ālimun*.

<sup>16</sup> Reckendorf 1921, pp. 370–371. See also Fischer 2002, p. 157.

<sup>17</sup> Beeston 1968, p. 60.

<sup>18</sup> Badawi *et al.* 2004, pp. 332–333. See also: Lewkowicz 1971, vol. 47, p. 811.

<sup>19</sup> Dahlgren 2007, vol. 4, p. 504.

<sup>20</sup> Khan 1988, pp. 44–45. See also Margolin 2015, p. 140. Margolin states that in modern Palestinian literature the textual function of *'ammā – fa* clauses is to indicate a turning point in the discourse by changing the subject or the topic of the discourse.

also reflects a grammatical structure, thus *information structure* closely correlates with sentence grammar. This is exhibited by the term *topicalisation*, which is commonly used in reference to a syntactic structure in which an object noun phrase, whose normal position is after a verb, appears in the clause-initial position before the subject or before the verb<sup>21</sup> in order to mark it as the theme or the topic of the sentence.<sup>22</sup>

Usually a sentence wherein one of the syntactic components is preposed shows an information articulation where the *topic* is considered less informative and the *theme* is seen as the more informative part. The division in the information part is also referred to as *Theme-Rheme*, *Topic-Comment* or *Topic-Focus*. Clearly, this dichotomy of the informational units is distinct from syntactic categories such as subject and predicate. There are various definitions of the terms *topic* or *theme*, as in the following examples: (a) A point of departure, an initial notion which is equally presented to both the speaker and the addressee, as if it were the ground on which they meet. (b) Old information that is known or at least obvious in the given situation and from which the speaker proceeds toward new information.<sup>23</sup> In other words, the topic must be referential; that is, it must represent an entity that is already evoked in the discourse, or else is in a salient set-relation to some entity already evoked in the discourse.<sup>24</sup> (c) The element about which something is stated, and therefore is regarded as the basis of the statement. (d) What the speaker is going to talk about. (e) The information that the speaker assumes to be already present in the addressee's consciousness.<sup>25</sup> (f) *Topic* is the item that is supposed to be in the addressees' memory and the speaker would like to activate it at a given point in time.<sup>26</sup>

In this article, I adopt the concept of *topic* as the element about which the utterance is stated; that is, it is the subject of the sentence. Furthermore, what concerns me most is the agreement among researchers that to determine whether a specific noun phrase is the topic of the statement, one must examine first the context and see whether the sentence is pragmatically constructed as being about that topic.<sup>27</sup> This might be clarified by the following example: regarding the sentence *the children went to school*, one must know the context to understand the sentence's structure and meaning. In the discourse *What did the children do? The children went to school*, the subject *the children* is the topic of the sentence. However, in the speech *Who went to school? The children went to school*, the statement in the answer is not about the children but provides information regarding the question *who*? It identifies who went to school, therefore the noun phrase *The children* cannot be identified as the *topic*.<sup>28</sup> Another example is the sentence *The kids, they are real people, and they are interesting and (...)*. From a morphosyntactic point of view, *The kids* is a definite noun functioning

<sup>21</sup> Lambrecht 1995, pp. 1–2, 31.

<sup>22</sup> Dahlgren 2007, vol. 4, p. 501.

<sup>23</sup> Casielles-Suárez 2004, pp. 20–21.

<sup>24</sup> Prince 1981, p. 251. See also Gregory and Michaelis 2001, pp. 1672–1673.

<sup>25</sup> The research literature distinguishes presupposed/identifiable information from asserted/non-identifiable information. *Presupposed* information is that of which the speaker and the hearer are assumed to have some shared knowledge of representation at the time of the statement. *Asserted* information is that of which only the speaker has knowledge of representation at the time of utterance. See Lambrecht 1995, pp. 79–80.

<sup>26</sup> Casielles-Suárez 2004, pp. 20–21.

<sup>27</sup> Lambrecht 1995, pp. 121–122.

<sup>28</sup> Lambrecht 1995, pp. 121–122. See also Casielles-Suárez 2004, p. 30; Goutsos 1997, p. 5 (see informational properties in table 1.1 in the book).

as the subject of the sentence. Yet considering its context, *Both my husband and I work and our children are in sixth, fourth and third grade. And the school years are wonderful, they're just wonderful (...) The kids, they are real people, and they are interesting (...)*, one sees that the denotation of *the kids* has been previously mentioned via the expression *our children*.<sup>29</sup>

To fully understand the term *topic*, we should briefly refer to the term *focus*. *Focus* might be defined as the complement of the *topic* because it provides some new information about it and it occurs toward the end of the sentence. Although this is the definition commonly found in the research literature, various scholars reject it. First, focus does not necessarily present new information not previously mentioned. More accurately, the *focus* is the information that cannot be recovered from the preceding context.<sup>30</sup> Alternatively, it is information in the sentence that the speaker assumes is not shared by him/her and the listener, while the *topic* is the information shared by both.<sup>31</sup> In the following sentence *What happened to your car? My car (it) broke down*, the topic is *the car* and the verb *broke down* is the focus, so this is called a predicate-focus structure. The presupposed knowledge is the car; that is, both speaker and hearer know about the existence of the car and to whom it belongs. The predicate, on the other hand, is the asserted information, and only the speaker has a representation of this information when he/she speaks.<sup>32</sup>

### 1.3. Objectives of the Article

It has been observed that the particle *'ammā* has five functions: (1) a conditional particle or a particle that semantically denotes condition, but syntactically cannot be considered a conditional particle because it is not followed by a verb in jussive mood; (2) *ḥarfū bīdā* "particle indicating the start of a new speech"; (3) *ḥarfū tafṣīl* "particle indicating elaboration"; (4) *ḥarfū tawkīd* "particle denoting emphasis"; (5) to indicate a shift in topic.

In the present article, the particle *'ammā* is viewed as a discourse particle. There is a range of theoretical approaches to the function of discourse particles. Here I take the coherence-based approach, aiming to show that the discourse particle *'ammā* marks various relations between adjacent parts of the discourse unit. First, in section two I review general issues connected with the definition of the term *discourse particle* and how they contribute to the coherence of the text. I also refer to some modern studies which offer an insight into discourse particles in Arabic. In section three I treat the range of functions that the discourse particle *'ammā* is deemed to perform.

## 2. A definition of the term discourse particle

*Discourse particles*, known by other names such as *discourse operators* or *discourse markers*, encompass various particles such as conversational particles, for example, *well*, or a variety of connective elements, for example, *so*, *after*, *moreover*. These linguistic expressions do not affect the propositional content

<sup>29</sup> Gregory and Michaelis 2001, p. 1683.

<sup>30</sup> Lambrecht 1995, p. 207. He cites from Halliday, "Notes on transitivity and themes in English," Part II, *Journal of Linguistics* 3(1967), pp. 204f.

<sup>31</sup> Lambrecht 1995, p. 207. He cites from Jackendoff, *Semantic Interpretation in Generative Grammar* (1972), p. 230.

<sup>32</sup> Lambrecht 1995, pp. 225–226.



of the utterances in which they occur.<sup>33</sup> Discourse particles have various characterisations:<sup>34</sup> (1) Connectivity. That is, they are used to relate utterances or other discourse units; (2) Optionality. That is, they can be removed from the text without causing any syntactic change in the syntactic structure. Moreover, if they are omitted, the relationship signalled by this particle is still known to the listener. However, the option to delete the discourse particles from the text does not necessarily mean that they are redundant. They are required to guide the listener/reader toward a particular interpretation or to reinforce the interpretation intended by the speaker;<sup>35</sup> (3) Non-truth conditionality. That is, they contribute nothing to the truth-conditions of the proposition expressed by an utterance.<sup>36</sup> In other words, although the discourse particles are introduced into sentences, they do not affect the propositional content; (4) Initiality. Most discourse particles appear in initial position of the clause – probably for communicative reasons. Namely, the interpretation of the utterance is restricted from the outset, therefore the listener/reader should not be concerned with that utterance's optional interpretations;<sup>37</sup> (5) Weak clause association. That is, discourse markers regarded outside the sentence's propositional content, but also outside its syntactic structure. However, when the particle *'ammā* is introduced into a sentence, it may in some cases cause a change in the word order; (6) Multi-Categorical. That is, discourse particles are categorised under different syntactic classes. For example, *now* is an adverb, *and* is a conjunction, *oh* is an interjection and *say* is a verb.<sup>38</sup> *'ammā* on the other hand can be classified only as a particle.

As for their contribution to text coherence, discourse particles are contextual coordinators of two kinds: first, they are deictic; that is, they signal that there is something that follows the first utterance. For example, the discourse particle *but* indicates that the speaker's action continues. Second, the discourse particle may indicate how the utterances are joined together. For example, *but* may indicate a contrasting idea. Thus Schourup, referring to Schiffrin (1987, p. 24), concludes: "discourse particles contribute to coherence by establishing multiple contextual coordinates simultaneously, thus facilitating the integration of various components of talk. Coherence is seen as constructed through relations between adjacent discourse units." In other words, cohesion depends on the identification and understanding of the relation between the textual units. Discourse particles play an important role in identifying these relations.<sup>39</sup>

According to Halliday and Hasan, conjunctives imply four relations: additive, adversative, causal and temporal.<sup>40</sup> Schourup mentions that discourse particles (which include the conjunctives mentioned by Halliday and Hasan) are additionally of four types: first are topic markers, which indicate the topic as the departure point of the utterance; they mark change of topic, introduction of a new topic, or return to a prior topic.<sup>41</sup> Second are contrastive markers, which

<sup>33</sup> Schourup 1999, p. 227.

<sup>34</sup> Schourup (1999) mentions among the characteristics the "orality" of the discourse particles; that is, they are mostly used in speech although they might occur in writing.

<sup>35</sup> Schourup 1999, pp. 231–232.

<sup>36</sup> Schourup 1999, p. 232.

<sup>37</sup> Schourup 1999, p. 233.

<sup>38</sup> Schourup 1999, p. 234.

<sup>39</sup> Schourup 1999, pp. 239–240.

<sup>40</sup> Halliday and Hasan 1976, pp. 242–243.

<sup>41</sup> Schourup 1999, p. 257. Stede and Schmitz (2000, p. 131) call this function "push" or "pop"; that is, particles which mark the opening of a new subtopic and the return to the previous topic.

indicate the contrast between two statements. Third are elaborative markers, or what Halliday and Hasan call additive conjunctions. Fourth are inferential markers, indicating that a specific utterance is a conclusion that follows from the preceding discourse.<sup>42</sup>

The particle *'ammā*, to the best of my knowledge, has never been identified or classified as a *discourse particle* or *discourse marker* by either Arab grammarians or Western scholars, as shown previously. This argument has also been made recently by al-Kohlani (2010) in her dissertation on the discourse marker used in Arabic newspaper opinion articles. She states:

while the study of discourse markers was not within the range of Arab grammarians' interest, particles, however, which are the source forms of many markers, were treated extensively in their works. They provided comprehensive descriptions of these linguistic devices categorizing them as a grammatical class whose members operate within the sentence boundaries.<sup>43</sup>

As for modern treatment of discourse markers in Arabic, al-Kohlani says that modern studies are not much different from the description of particles presented by the traditional grammarians; that is, these studies are usually syntax-oriented, and ignore the function of the particle at the discourse level. Al-Kohlani found only few works devoted to the study of the discourse particle, describing them within a certain theoretical framework. Blau (1977) investigated adverbial constructions in Hebrew and Arabic. His main contribution is a long list of discourse particles in Arabic, albeit without explaining their true function in the text. Johnstone (1990) refers to discourse markers in Modern Standard Arabic. She found that they display three features of discourse style: parataxis, formulaicity and repetition. But like Blau, she does not refer to their textual function. Ryding (2005) treats the discourse markers in the chapter Connectives and Conjunctions, saying that these components' primary function is to connect sentences, clauses, phrases and paragraphs.<sup>44</sup>

Another study mentioned by al-Kohlani is Kammensjö's (2005) on discourse connectives in Arabic lecturing monologues. Kammensjö, who also takes the cohesive-based approach, implies the expansion function of the analysed discourse particles.<sup>45</sup>

What concerns me the most in al-Kohlani's work is the classification of *'ammā* as a discourse marker used in Arabic newspaper opinion articles, together with other discourse markers such as *bal* "rather," *'inna* "certainly," "indeed," *'aydan* "also," *min tamma* "thus," "therefore," *'adif'ilā dālika* "in addition to," "moreover" and *'a'taqidu 'anna* "I think that." All these words belong to different grammatical word classes. They occur in initial position of the clause, and serve to connect text units guiding the reader's interpretation throughout the text.<sup>46</sup> al-Kohlani finds that in the analysed material the discourse marker *'ammā...fā* signals a contrastive relation between two propositions that introduce the same idea. Furthermore, the emphatic function of this particle serving in the text as topicaliser relates to its contrastive function.<sup>47</sup>

<sup>42</sup> Schourup 1999, pp. 257–259. These four types are suggested by Fraser 1996, pp. 187–188. Lewis (2006, pp. 44–47) mentions three types under the paragraph entitled "rhetorical management": elaboration, justification (for example, *after all*) and retreat (for example, *well*).

<sup>43</sup> al-Kohlani 2010, pp. 73–75.

<sup>44</sup> al-Kohlani 2010, pp. 76–77.

<sup>45</sup> al-Kohlani 2010, pp. 90–91.

<sup>46</sup> al-Kohlani 2010, pp. 1, 242.

<sup>47</sup> al-Kohlani 2010, pp. 295, 301–302.

### 3. The function of *'ammā* in the Qur'ān

I analysed all 55 occurrences of this particle in the Qur'ān.<sup>48</sup> Of these, I present here only some representative cases because a large number of illustrations might generate information overload, and the same explanations could repeat themselves. After each example, I do mention additional cases for which the presented analysis holds.

The analytical model employed in this study first describes the content of the unit in which the clauses preceded by *'ammā* are found. This is because the relation within the unit can only be understood if the analysis is not restricted to sentence boundaries. At this stage I pay attention to the thematic context of each unit to see whether the particle *'ammā* is used in a specific thematic context and signals a specific relation. Then I explain how the information in the discourse unit is organised. Note in this context that *'ammā*-clauses are positioned in the middle of the unit; and excluding two cases (Q: 18:79 and Q 12:41 – see section 3.3) *'ammā* is preceded by the connective particle *wa-* or *fā-*. Next, I identify the functional relation between the parts of the analysed unit. Finally, I classify *'ammā* into four groups according to function.

#### 3.1. *'ammā* denoting contradiction

In the following examples (1–9) *'ammā* has the same function, but I distinguish two sub-groups because each has a different thematic context and different structural features:

##### First sub-group:

All the structures classified in this sub-group display a set of associated and shared properties. First, all concern Judgment Day, or more specifically the state of the believers and non-believers on the Day of Judgment:

(1) وَيَوْمَ تَقُومُ السَّاعَةُ يُنْفِقُونَ  
فَأَمَّا الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ فَهُمْ فِي رَوْضَةٍ يُحْبَرُونَ  
وَأَمَّا الَّذِينَ كَفَرُوا وَكَذَّبُوا بِآيَاتِنَا وَلِقَاءِ الْآخِرَةِ فَأُولَئِكَ فِي الْعَذَابِ مُحْضَرُونَ

*wa-yawma taqūmu s-sā'atu yawma'idin yatafarraqūna*  
*fā-'ammā lladīna 'āmanū wa-'amilū ṣ-ṣāliḥāti fā-hum fi rawḍatin yuḥbarūna*  
*wa-'ammā lladīna kafarū wa-kaddabū bi-'āyātina wa-liqā'i l-'āḥirati fā-'ulā'ika fi l-'adābi muḥḍarūna*  
(Q 30:14–16)

“Upon the day when the Hour is come, that day they shall be divided; as for those who believed, and did deeds of righteousness, they shall be made happy in the garden (of paradise). But, as for those who disbelieved, and cried lies to Our signs and the encounter of the Hereafter, they shall be arraigned into the chastisement.”<sup>49</sup>

<sup>48</sup> In most cases *'ammā* appears twice or even more in the same verse. For this reason, 26 verses are analysed in section three.

<sup>49</sup> The translation of the Qur'ānic verses is based on the translation of Arberry 1964 and the translation of al-Islam.org (an enlightening commentary).

These verses indicate the different groups of people on the Day of the Hereafter: the people of Paradise are identified with faith and righteous deeds, while the people of Hell lack faith, resulting in both rejection of Divine signs and of Resurrection. The believers will be in the state of joy and happiness because they will luxuriate in the best and the most beautiful and joyful gardens of Paradise. The people of Hell, however, will be unhappy, because they will be delivered up for chastisement.

Secondly, all discourse units exhibit the same structure. They start with a statement, followed by two clauses beginning with *'ammā*. One refers to the believers, the other to the non-believers. So regarding the first example (Q 30:14–16), the following division can be made:

<b>Statement</b>	<i>wa-yawma taqūmu s-sā'atu yawma'idin yatafarraqūna</i>
<b>First sentence (the believers)</b>	<i>fa-'ammā lladīna 'āmanū wa-'amilū ṣ-ṣāliḥāti fa-hum fi rawḍatin yuḥḥarūna</i>
<b>Second sentence (the unbelievers)</b>	<i>wa-'ammā lladīna kafarū wa-kaddabū bi-'āyātīnā wa-liqā'i l-'āḥirati fa-'ulā'ika fi l-'adābi muḥḍarūn</i>

Thirdly, there are various potential elements in the statement that can serve as the topic. The particle *'ammā* is used first and foremost as a *topic marker*; that is, *'ammā* is a grammatical device to promote a referent on the *topic acceptability* scale from the *accessible* to the *active* state, and from this point, this referent is coded as the topic of the statement.<sup>50</sup> Q 30:14 (*wa-yawma taqūmu s-sā'atu yawma'idin yatafarraqūna*) contains two potential topics: *as-sā'atu* “the Hour” and “the people,” a topic implicit in the verb *yatafarraqūna* “will be divided.” The grammatical purpose of *'ammā* is to signal that the latter topic (the people) is promoted and the sentence concerns it. Furthermore, in all structures in this category, the topic has already been evoked.

Q 30:14–16 has the two topics *lladīna 'āmanū wa-'amilū ṣ-ṣāliḥāti* and *lladīna kafarū wa-kaddabū bi-'āyātīnā*, which are syntactically and semantically different from the implicit pronoun (*they* in *yatafarraqūna*) to which they are related; however, it could be said that they are in a salient set-relation to the implicit pronoun previously evoked.

Fourthly, in all cases in this category *'ammā* has the same function, which is usually identified by the Arab grammarians as *ḥarf tafsīl* “particle indicating elaboration.” For example:

(2) يَوْمَ يَأْتِ لَا تَكَلَّمُ نَفْسٌ إِلَّا بِإِذْنِهِ فَمِنْهُمْ شَقِيٌّ وَسَعِيدٌ  
فَأَمَّا الَّذِينَ شَقُوا فَمِنَ النَّارِ لَهُمْ فِيهَا زَفِيرٌ وَشَهِيقٌ خَالِدِينَ فِيهَا  
وَأَمَّا الَّذِينَ سَعَدُوا فَمِنَ الْجَنَّةِ خَالِدِينَ فِيهَا

*yawma ya'ti lā takallamu nafsun 'illā bi-'idnīhī fa-minhum šāqiyyun wa-sā'idun*  
*fa-'ammā lladīna šaqū fa-fi n-nāri labum fihā zafīrun wa-šāḥiqun ḥālidīna fihā (...) wa-'ammā lladīna*  
*su'idū fa-fi l-ḡannati ḥālidīna fihā* (Q 11:105–108)<sup>51</sup>

“The day it comes, no soul shall speak save by His Leave; some of them shall be wretched and some happy. As for the wretched, they shall be in the fire, wherein there shall be for them moaning and sighing, therein dwelling forever (...) And as for the happy, they shall be in paradise, therein dwelling forever.”

<sup>50</sup> This explanation is given by Lambrecht (1995, p. 183), when he discusses detachment constructions such as the structure *as...for*, which is equivalent to *'ammā... fa* structures.

<sup>51</sup> A similar example is Q 72:15.

Zakašī mentions Q 11:105–108: *wa-tudkaru li-tafṣīli mā 'aḡmalahu l-muḥātibu wa-li-l-iqtīṣāri 'alā ba'di mā dda'a*<sup>52</sup> “[the particle 'ammā is mentioned] to elaborate what the speaker has summarized and to restrict some [of the information] which he maintains.” Zarkašī adds that the two clauses starting with 'ammā elaborate what was previously said in Q 11:103 (*dālika yawmun maḡmū'un lahu n-nāsu* “and that is a Day when all (the dwellers of the heavens and the earth) will be present”) and it clarifies the status/regulations of the wretched man and the happy man.<sup>53</sup>

The function of *tafṣīl* “elaboration” is also mentioned in reference to the following example:

(3) فَأَحْكُم بَيْنَكُمْ فِيمَا كُنْتُمْ فِيهِ تَخْتَلِفُونَ  
فَأَمَّا الَّذِينَ كَفَرُوا فَأُعَذِّبُهُمْ عَذَابًا شَدِيدًا فِي الدُّنْيَا وَالْآخِرَةِ وَمَا لَهُمْ مِنْ نَاصِرِينَ  
وَأَمَّا الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ فَيُوَفِّيهِمْ أُجُورَهُمْ وَاللَّهُ لَا يُحِبُّ الظَّالِمِينَ

*fa-'aḥkumu baynakum fi-mā kuntum fihi taḡtalifūna*  
*fa-'ammā lladīna kafarū fa-'u'addibuhum 'adāban šadīdan fi d-dunyā*  
*wa-l-'āḥirati wa-mā lahum min nāṣirīna*  
*wa-'ammā lladīna āmanū wa-'amilū ṣ-ṣāliḥāti fa-yuwaḡḡihim 'uḡūrahum* (Q 3:55–57)

“I will decide between you, as to what you were at variance. As for the unbelievers, I will chastise them with a terrible chastisement in this world and the next, they shall have no helpers. But as for the believers, who do deeds of righteousness, He will pay them in full their wages.”

In his commentary on Q 3:56–57, Bayḏāwī says regarding the function of the two 'ammā-clauses: *tafṣīrun li-l-ḥukmi wa-tafṣīlun lahu*<sup>54</sup> “[these two clauses are mentioned] as an explanation/elucidation of God's decision and to elaborate it.”

I would like to challenge the claim that 'ammā in the above examples is *ḥarfū tafṣīl* “particle indicating elaboration” because in my opinion removing 'ammā from the clauses has no effect on the meaning; that is, the elaboration (*tafṣīl*) can be realised without using the particle 'ammā. As for example two, it apparently could have been paraphrased without 'ammā, while the syntactic function of the clauses does not change:

\* *yawma ya'ti lā takallamu nafsun 'illā bi-'idnihi fa-minhum šaqiyyun wa-sa'idun; lladīna šaqū fa-fi n-nāri lahum fiḥā zafīrun wa-šahīqun ḥalidīna fiḥā wa-lladīna su'idū fa-fi l-ḡannati ḥalidīna fiḥā*

“The day it comes, no soul shall speak save by His Leave; some of them shall be wretched and some happy. The wretched shall be in the fire, wherein there shall be for them moaning and sighing, therein dwelling forever (...) And the happy shall be in paradise dwelling forever therein.”

In this paraphrased verse, the listener or the reader can understand immediately that the two clauses that start with the relative pronoun *lladīna* add some information or elaborate the information about the wretched and the happy people mentioned previously. The same meaning may be expressed by various sentence forms (for example, with or without 'ammā); the question then is what is the function of 'ammā?

I argue that 'ammā in all cases in this category functions as a discourse particle. It links and organises the idea expressed in the utterance in a logical order: first comes a short statement

<sup>52</sup> Zarkašī 1957, vol. 4, p. 242.

<sup>53</sup> Zarkašī 1957, vol. 4, p. 243.

<sup>54</sup> Bayḏāwī 1996, vol. 2, p. 45.

regarding Judgment Day, then two clauses that clarify what will happen to the people on that day. Since I cannot ignore that in all cases these two clauses speak about the believers and the unbelievers, I also argue that it conveys a contrastive relation between believers and nonbelievers.<sup>55</sup> This explanation might be clarified by the following example:

(4) يَوْمَ تَبْيَضُّ وُجُوهٌ وَتَسْوَدُّ وُجُوهٌ  
فَأَمَّا الَّذِينَ اسْوَدَّتْ وُجُوهُهُمْ أَكَفَرْتُمْ بَعْدَ إِيمَانِكُمْ فَذُوقُوا الْعَذَابَ بِمَا كُنْتُمْ تَكْفُرُونَ  
وَأَمَّا الَّذِينَ ابْيَضَّتْ وُجُوهُهُمْ فَفِي رَحْمَةِ اللَّهِ هُمْ فِيهَا خَالِدُونَ

*yawma tabyaddu wuğūhun wa-taswaddu wuğūhun*  
*fa-'ammā lladīna swaddat wuğūhuhum 'a-kafartum ba'da 'imānikum fa-dūqū*  
*l-'adāba bi-mā kuntum takfurūna*  
*wa-'ammā lladīna byaddat wuğūhuhum fa-fi raḥmati llāhi hum fihā ḥālidūna* (Q 3:106–107)

“The day when some faces are blackened, and some faces whitened. As for those whose faces are blackened—did you disbelieve after you believed? Then taste the chastisement for that you disbelieved! But as for those whose faces are whitened, they shall be in God’s mercy, therein dwelling forever.”

Q 3:106–107 is a discourse unit composed of three main sentences where the two *'ammā*-clauses are linked by the discourse particle *'ammā* in a contrasting relation. It might be well argued that even when *'ammā* is omitted the contradiction between the two propositions is still realised. Nevertheless, I argue that in our case the contrast between the components is highlighted due to the restricted word order that *'ammā* requires. The two clauses are arranged in an exact syntactic balance, where each syntactic component has its corresponding element in the second *'ammā* sentence, as the following schema shows:

Subject			Predicate		
<i>fa-'ammā</i>	<i>lladīna</i>	<i>swaddat wuğūhuhum</i>	<i>fa</i>	<i>dūqū</i>	<i>l-'adāba</i>
<i>wa-'ammā</i>	<i>lladīna</i>	<i>byaddat wuğūhuhum</i>	<i>fa</i>	<i>fi raḥmati llāhi</i>	<i>hum fihā ḥālidūna</i>

The next example is also classified in this group, although it is differentiated from the others in two respects:

(5) وَمَنْ يَسْتَنْكِفْ عَنْ عِبَادَتِهِ وَيَسْتَكْبِرْ فَسَيَحْشُرُهُمْ إِلَيْهِ جَمِيعًا  
فَأَمَّا الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ فَيُوَفِّيهِمْ أُجُورَهُمْ وَيَزِيدُهُمْ مِّنْ فَضْلِهِ  
وَأَمَّا الَّذِينَ اسْتَنكَفُوا وَاسْتَكْبَرُوا فَيُعَذِّبُهُمْ عَذَابًا أَلِيمًا

*wa-man yastankif 'an 'ibādātihi wa-yastakbir fa-sa-yahšuruhum 'ilayhi ġamī'an*  
*fa-'ammā lladīna 'āmanū wa-amilū ṣ-ṣālihāti fa-yuwaffihim 'uğūrahum*

<sup>55</sup> This idea was adopted from the PhD thesis of Noga Ilani (1992), wherein she discuss *be-'asher...le* structures (in English “as for”), which is regarded as a *casus-pendens* structure in Hebrew. Ilani says that it is possible to construct the *casus-pendens* structure without using conjunctions such as *be-'asher...le* (“as for”); however, they add to the coherence and the connection between the sentences and indicate the relation existing between the topic of the *casus-pendens* structure and the theme which was previously discussed. This relation might be of contrast. See Ilani 1992, p. 549. See also Ilani 2002–2004, p. 23.



*wa-yazīdūhum min fadlīhī*

*wa-'ammā lladīna stankafū wa-stakbarū fa-yu'addibūhum 'adāban 'alīman* (Q 4:172–173)

“Whosoever disdains his service and shows pride, He will gather them soon to Him. As for the believers, who do deeds of righteousness, He will pay them in full their wages, and He will give them more of His bounty; and as for them who disdain, and wax proud, them he will chastise with a painful chastisement.”

First, verse 172 speaks of the Messiah, and that he would never disdain to be a servant of Allāh, nor would the angels stationed near to Him. The connection to Judgment Day is established by the second part of the sentence “and whoever disdains His service, and shows pride, He will gather them all soon to Him [that is, on Judgment Day].” Second, usually both topics placed after 'ammā are evoked previously (in the “statement” sentence); in Q 4:172–173, however, only one topic is previously mentioned and that is *lladīna stankafū wa-stakbarū*, which refers back to *man yastankif wa-yastakbir*. Therefore, one cannot help wondering why this unit has not been paraphrased simply by omitting the second 'ammā sentence and integrating it into the “statement” sentence, as follows:

*\*wa-man yastankif 'an 'ibādātihī wa-yastakbir sa-yahşuruhum 'ilayhi ġamī'an*

*wa-yu'addibūhum 'adāban 'alīman*

“whosoever disdains his service and shows pride, He will gather them soon to Him and he will chastise them with a painful chastisement.”

It might be argued that the first topic *lladīna 'āmanū wa-'amilū ṣ-ṣāliḥātī* is indeed literally not evoked previously, but it is readily inferred from another entity evoked in the discourse because *lladīna 'āmanū wa-'amilū ṣ-ṣāliḥātī* is the contrast of *lladīna stankafū wa-stakbarū*. Mentioning the states of both the believers and the unbelievers in two 'ammā-clauses is intended to indicate the contrast between the two states on Judgment Day.

Additional examples that can be classified in this sub-group are Q 32:18–20; 45:28–31; 69:18–26; 79:35–41; 92:5–8; 101:6–8.

**Second sub-group:** In the following examples the discourse units are thematically diverse, in that some unique features are not found in the first group:

(6) إِنَّ اللَّهَ لَا يَسْتَحْيِي أَنْ يَضْرِبَ مَثَلًا مَّا بَعُوضَةً فَمَا فَوْقَهَا فَأَمَّا الَّذِينَ آمَنُوا فَيَعْلَمُونَ أَنَّهُ الْحَقُّ مِنْ رَبِّهِمْ وَأَمَّا الَّذِينَ كَفَرُوا فَيَقُولُونَ مَاذَا أَرَادَ اللَّهُ بِهَذَا مَثَلًا

*'inna llāha lā yastahyī 'an yadriba mataḥalan mā ba'ūdatan fa-mā fawqahā*

*fa-'ammā lladīna 'āmanū fa-yalamūna 'annahu l-ḥaqqu min rabbihim*

*wa-'ammā lladīna kafarū fa-yaqūlūna mādhā 'arādā llāhu bi-hādā mataḥalan* (Q 2:26)

“God is not ashamed to set forth a parable/similitude even of a gnat, or aught above it. As for the believers, they know it is the truth from their Lord; but as for the unbelievers, they say: What did God desire by this for a parable/similitude?”

The Arab grammarians note Q 2:26 as an example of 'ammā being used as *ḥarfū tafṣīl* “a particle denoting elaboration.”<sup>56</sup> The problem is that when I look at Q 2:26 it is not quite clear what

<sup>56</sup> See Suyūṭī 1989, vol. 4, p. 357. See also Zarkašī 1957, vol. 4, p. 243.

exactly the *'ammā*-clauses elaborate. The difficulty is rooted first and foremost in the absence of previous evocation of the topicalised components (which in our case constitute a relative clause). The main sentence, which I call a “statement,” aims to clarify that God does not recoil from any means in his parables to make the meaning of an abstract idea clearer and more explicit, even when the object of the parable is a gnat (a creature of a small size). The believers and the unbelievers are not mentioned in this statement, and the coherence of this unit seems only achieved by the suffixed pronoun *-hu* in (*fa-ya'lamūna*) *'annahu*, which refers to the parable, and by the demonstrative pronoun (*bi-*)*hādā*, which refers to the gnat, which is brought in as a parable. Even though neither topic—*those who believe* and *those who disbelieve*—is evoked previously in the discourse, the listener/reader does not feel that the three sentences that form this unit are detached. After reading this unit, it is clear that the purpose of the *'ammā*-clauses is to reveal the believers' and nonbelievers' attitudes to the words of God. However, this purpose does not explain the choice of *ammā*, particularly because this unit could have been paraphrased differently without *ammā* and would still have expressed the same idea: \**'inna llāha lā yastahyī 'an yadriba mataḷan mā ba'ūdatan fa-mā fawqahā wa-lladīna 'āmanū ya'lamūna 'annahu l-ḥaqqu min rabbi-him lākinna lladīna kafarū yaqūlūna māḍā 'arāda llāhu bi-hādā mataḷan* “God is not ashamed to set forth a parable/similitude even of a gnat, or aught above it. The believers, they know it is the truth from their Lord; but the unbelievers, they say: What did God desire by this for a parable?”

Here too *'ammā* is used as a discourse particle which holds and connects all the unit's parts. Additionally, it conveys the contrast between believers and nonbelievers regarding the Qur'anic parables, which have a variety of forms, cover many themes and are meant to teach the people moral lessons.<sup>57</sup>

In the next example, it is interesting to find that the first topicalised noun (*az-zabad* “the foam”) preceded by *'ammā* is evoked previously several times, while the second topicalised structure (*mā yanfa'u n-nāsa* “what benefits the people”) is semantically related to what has been said previously:

(7) أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَسَالَتْ أَوْدِيَّتُهُ بِقَدَرِهَا فَاحْتَمَلَ السَّيْلُ زَبَدًا رَابِيًا وَمِمَّا يُوقِدُونَ عَلَيْهِ فِي النَّارِ ابْتِغَاءَ حِلْيَةٍ أَوْ مَتَاعٍ زَبَدٌ مِثْلَهُ كَذَلِكَ يَضْرِبُ اللَّهُ الْحَقَّ وَالْبَاطِلَ  
فَأَمَّا الزَّبَدُ فَيَذْهَبُ جُفَاءً  
وَأَمَّا مَا يَنْفَعُ النَّاسَ فَيَمْكُثُ فِي الْأَرْضِ كَذَلِكَ يَضْرِبُ اللَّهُ الْأَمْثَالَ

*'anzala mina s-samā'i mā'an fa-sālat 'awdiyātun bi-qadarihā fa-ḥtamala*  
*s-saylu zabadan rābiyan wa-mimmā yūqidūna 'alayhi fī n-nāri btiḡā'a ḥilyatin 'aw matā'in zabadun*  
*mitluhū ka-dālīka yadribu llāhu l-ḥaqqā wa-l-bāṭila*  
*fa-'ammā z-zabadu fa-yadhabu ḡufā'an*  
*wa-'ammā mā yanfa'u n-nāsa fa-yamkuṭu fī l-'arḍi ka-dālīka yadribu llāhu*  
*l-'amtāla* (Q 13:17)

“He sends down out of heaven water, and the wadis/valleys flow each in its measure, and the torrent carries away the foam that mounts up to the surface; and out of what they heat in the fire in order

<sup>57</sup> The explanation of Q 2:26 might be applied to Q 4:174–175, although the second *'ammā* sentence in which the unbelievers should have been topicalised is omitted, as the following grammarians mention: Ibn Hišām 1969, vol. 1, p. 59. See also: Suyūṭī 1989, vol. 4, p. 357.

to make ornament or ware, out of that rises foam like unto it. So God strikes both the true and the false. As for the foam, it vanishes as jetsam, and what profits men abiding in the earth.”

It is inferred from the final clause (*ka-dālīka yaḍribu llāhu l-'amtāla*) that this verse is no more than a parable to explain and to give an explicit example of the effects of belief and unbelief. There are two parables: in the first the water is analogous to the faith and the unbelief is analogous to the foam that appears on the water's surface; in the second, belief is exemplified by a molten piece of gold and silver which is pure, while unbelief is exemplified by foam that pollutes the pureness of the molten gold and silver.<sup>58</sup> The word *foam* (*zabad*) is a central motif in this discourse unit. Assuming that the parables in this verse become clear in the first part—that is, the comparison between water and foam, melted gold and water, is clear—the question to be asked is what is the purpose of the 'ammā-clauses introduced in this unit? The purpose of the second part of this discourse unit (that is, the 'ammā-clauses) is to summarise this thematic unit by implicating and emphasising the contradiction between belief and unbelief, which are compared to foam (*az-zabad*), and the things that benefit the people (*mā yanfa'u n-nāsa*—this relative clause, which serves as topic, refers to water, gold and silver). Connecting the parts of this discourse unit and expressing the relation of contradiction is achieved by using 'ammā.

The same function is exhibited in the following example:

(8) وَجَدَهَا تَغْرُبُ فِي عَيْنٍ حَمِئَةٍ وَوَجَدَ عِنْدَهَا قَوْمًا قُلْنَا يَا ذَا الْقَرْنَيْنِ إِمَّا أَنْ تُعَذِّبَ وَإِمَّا أَنْ تَتَّخِذَ فِيهِمْ حُسْنًا  
قَالَ أَمَّا مَنْ ظَلَمَ فَسَوْفَ نَعَذِّبُهُ ثُمَّ يُرَدُّ إِلَىٰ رَبِّهِ فَيُعَذِّبُهُ عَذَابًا ثُكْرًا  
وَأَمَّا مَنْ آمَنَ وَعَمِلَ صَالِحًا فَلَهُ جَزَاءُ الْحُسْنَىٰ وَنُسْقِيهِ لَهْ مِنْ أَمْرٍ نُسْرًا

*wa-wağada 'indahā qawman qulnā yā-ḏā l-qarnayni 'immā 'an tu'addiba wa-'immā 'an tattahida fihim ḥusnan*

*qāla 'ammā man ṣalama fa-sawfa nu'addibuhu tumma yuraddu 'ilā rabbihi fa-yu'addibuhu 'adāban nukran*

*wa-'ammā man 'āmana wa-'amila ṣālihan fa-lahū ġazā'an-i l-ḥusnā*

*wa-sa-naqūlu lahū min 'amrinā yusran* (Q 18:86–88)

“He found nearby people and we said: O *ḏū l-qarnayni*, either you shall chastise them, or you shall take toward them a way of kindness. He said: As for the evildoer, him we shall chastise, then he shall be returned to His Lord and he shall chastise him with a horrible chastisement. But as for him who believes, and does righteousness, he shall receive as recompense the best reward, and we shall speak to him mild words.”

Verse 86 speaks of *ḏū l-qarnayni*, who went on a journey until he reached the setting-place of the sun, where he found that the sun was setting in a muddy and dark spring.

The people that *ḏū l-qarnayni* saw in that place were unbelievers, so God ordered him to kill them or to take them captive. As a response to God's command, *ḏū l-qarnayni* warns the people, while he specifies who the people are who will be punished and, by contrast, who will be saved since they are true believers. By using the discourse particle 'ammā the relation of contrast that holds between the successive clauses is maintained.

<sup>58</sup> Tabarī 1992, vol. 7, pp. 369–370.

(9) أَنْ جَاءَهُ الْأَعْمَى وَمَا يُدْرِيكَ لَعَلَّهُ يَزَكِّي أَوْ يَدْكُرُ فَتَنَفَعَهُ الذِّكْرَى  
أَمَّا مَنْ اسْتَعْنَى فَأَنْتَ لَهُ تَصَدَّى وَمَا عَلَيْكَ أَلَّا يَزَكِّي  
وَأَمَّا مَنْ جَاءَكَ يَسْعَى وَهُوَ يَخْشَى فَأَنْتَ عَنْهُ تَلَهَّى

*'an ḡā'ahu l-'a'mā wa-mā yudrika la'allahū yazzakkā 'aw yaddakkaru*  
*fa-tanfā'ahu d-dikrā*  
*'ammā mani staḡnā fa-'anta lahū taṣaddā wa-mā 'alayka 'allā yazzakkā*  
*wa-'ammā man ḡā'aka yas'ā wa-huwa yaḥšā fa-'anta 'anhū talahhā* (Q 80:2–10)

“There came to him the blind man. But what could tell you that perchance he might become pure (of sins). Or that he might remember, and the reminder might profit him. As for him who thinks himself self-sufficient, to him you attend. What does it matter to you if he will not become pure? But as to him who came to you running eagerly and fearfully, of him you are neglectful and divert your attention to another.”

According to Ṭabarī, this unit refers to an event when Muḥammad was deeply engaged in trying to explain the Holy Qur'ān to 'Utba Ibn Rabī'a, 'Abū Ḡahl Ibn Hišām and al-'Abbās Ibn 'Abd al-Muṭallib, trying to attract them to Islam. But he was interrupted by a blind man, named Ibn 'Umm Maktūm, who asked Muḥammad to teach him what he knew, but the Prophet refused and he turned away from Ibn 'Umm Maktūm and continued his interaction with the three people.<sup>59</sup>

After understanding the implied meaning of this statement, it seems that the two *'ammā*-clauses add no new information but repeat more explicitly what was said previously; the question again is what is the purpose of using such clauses? As in the other case examined in this category, the topicalised noun phrases receive a tonic stress<sup>60</sup> and they are usually referential and identifiable; that is, the listener or the reader already has a mental representation of these topics. Furthermore, the particle *'ammā* in all analysed cases has a twofold function: first, it facilitates the integration and organisation of all information expressed in the discourse unit; second, it is a discourse particle which establishes the contrast relation between the propositions in the unit.

### 3.2. *'ammā denoting an adversative relation*

In this category I classify the following two cases in which *'ammā* occurs only once:

(10) هُوَ الَّذِي أَنْزَلَ عَلَيْكَ الْكِتَابَ مِنْهُ آيَاتٌ مُحْكَمَاتٌ هُنَّ أُمُّ الْكِتَابِ وَأُخَرُ مُتَشَابِهَاتٌ فَأَمَّا الَّذِينَ فِي قُلُوبِهِمْ زَيْغٌ  
فَيَتَّبِعُونَ مَا تَشَابَهَ مِنْهُ ابْتِغَاءَ الْفِتْنَةِ وَابْتِغَاءَ تَأْوِيلِهِ

*huwa lladī 'anzala 'alayka l-kitāba minhu 'āyātun muḥkamātun hunna 'ummu*  
*l-kitābi wa-'uḥaru mutašābihātun fa-'ammā lladīna fī qulūbihim zayḡun*  
*fa-yattabi'ūna mā tašābaha minhu btiḡā'a l-fitnati wa-btiḡā'a ta'wīlihī* (Q 3:7)<sup>61</sup>

<sup>59</sup> Ṭabarī 1992, vol. 12, pp. 443–443.

<sup>60</sup> Noteworthy in this context is Lüling's explanation of *'ammā* which introduces the three-line pattern in Q 80:5–7 and 80:8–10. He says that *'ammā* “is of such a sober, prosaic, even one feels tempted to say ‘bureaucratic’ character that this form of expression would be inconceivable in the always highly emphatic rhetorical texts of strophic poetry.”

<sup>61</sup> According to Suyūṭī (1989, vol. 4, p. 357) the second *'ammā*-sentence in Q 3:7 is omitted and should be reconstructed as *'ammā ḡayruhum fa-yu'minūna bihi* “as for the other, they believe in the Book [without any attempt to cause any dissension by trying to interpret it].”

“It is He who sent down upon you the Book, wherein are verses clear that are the essence of the Book, and others ambiguous. But whose heart is swerving, they follow the ambiguous part, desiring dissension and desiring its interpretation.”

(II) وَيَوْمَ يُنَادِيهِمْ فَيَقُولُ مَاذَا أَجَبْتُمُ الْمُرْسَلِينَ فَعَمِيَتْ عَلَيْهِمُ الْأَنْبَاءُ يَوْمَئِذٍ فَهُمْ لَا يَتَسَاءَلُونَ  
فَأَمَّا مَنْ تَابَ وَآمَنَ وَعَمِلَ صَالِحًا فَعَسَىٰ أَنْ يَكُونَ مِنَ الْمُفْلِحِينَ

*wa-yawma yunādihim fa-yaqūlu māḍā 'ağabtumu l-mursalīna fa-'amiyat 'alayhimu l-'anbā'u yawma'idīn  
fa-hum lā yatasā'alūna fa-'ammā man tāba  
wa-'āmana wa-'amila ṣālihan fa-'asā 'an yakūna mina l-muflihinā (Q 28:65–67)*

“Upon the day when He shall call to them, and He shall say: What answer gave you to the Envoys? Upon that day the tidings will be darkened for them, nor will they ask each other. But those who repent and believe and work righteousness, haply they shall be among the prosperous.”

'ammā in these two cases implies an adversative relation, which led me to amend Arberry's original translation to “but.” Q 3:7 states that God has sent down to the people the Book, wherein there are decisive verses, that is, they express a clear concept, while others are allegorical, in which their meaning is hidden and they need a particular ability and knowledge to be rendered. But those in whose hearts there is perversity concentrate on the allegorical verses, seeking to give their own interpretation, while none knows their interpretation except Allāh and those firmly rooted in knowledge.

Q 28:65–67 says that on the Hereafter Day the people will be asked about their reaction before the Divine prophets, where it is clear that the unbelievers rejected the prophets, denigrated them and struggled against them. Therefore, in the next verse the Qur'an explicitly says that they will have no answer to deliver, nor can they hear any answer from each other. But those who believed and did good deeds (that is, supported the prophets) will surely be prosperous.

As a final remark, I would mention the interesting fact that the particle 'ammā is sometimes translated into Hebrew as having an adversative meaning. According to Goshen-Gottstein<sup>62</sup> the particle 'ammā which is used as emphatic particle is translated as 'aval (אבל), 'ulam (אולם), 'ah (אך) and omnam (אומנם); for example, *fa-'ammā l-maqāyisu fa-'innahā* is translated into Hebrew as

“ואולם ההקשים...הנה הם” (but/however the analogues...here they are)

### 3.3. 'ammā as a discourse particle organising the referents/topics in a linear fashion and denoting additive relation<sup>63</sup>

The verses mentioned in the following example belong to a larger discourse unit which starts with verse 60, which states that Moses told his servant to journey on until he reached the point where the two rivers met:

(12) فَانْطَلَقَا حَتَّىٰ إِذَا رَكِبَا فِي السَّفِينَةِ خَرَقَهَا (...) فَانْطَلَقَا حَتَّىٰ إِذَا لَقِيَا غُلَامًا فَقَتَلَهُ (...) فَانْطَلَقَا حَتَّىٰ إِذَا أَتَيَا أَهْلَ قَرْيَةٍ اسْتَطْعَمَا أَهْلَهَا فَأَبَوْا أَنْ يُضَيِّفُوهُمَا فَوَجَدَا فِيهَا جِدَارًا يُرِيدُ أَنْ يَنْقَضَ (...) أَمَّا السَّفِينَةُ فَكَانَتْ لِمَسَاكِينَ يَعْمَلُونَ فِي

<sup>62</sup> Goshen-Gottstein 2006, p. 208.

<sup>63</sup> Margolin 2015, p. 140, mentions this pragmatic function of 'ammā.

الْبَحْرِ فَأَرَدْتُ أَنْ أَعِيبَهَا (...) وَأَمَّا الْغُلَامُ فَكَانَ أَبَوَاهُ مُؤْمِنَيْنِ فَخَشِينَا أَنْ يُرْهِقَهُمَا طُغْيَانًا وَكُفْرًا (...) وَأَمَّا الْجِدَارُ فَكَانَ  
لِغُلَامَيْنِ يَتِيمَيْنِ فِي الْمَدِينَةِ وَكَانَ تَحْتَهُ كَنْزٌ لَهُمَا

*fa-nṭalaqā ḥattā 'idā rakibā fi s-safinati ḥaraqahā (...) fa-nṭalaqā ḥattā 'idā laqiya ḡulāman fa-qatalahu (...) fa-nṭalaqā ḥattā 'idā 'atayā 'ahla qaryatin-i sta'amā 'ahlahā fa-'abaw 'an yuḍayyifūhumā fa-waḡadā fihā ḡidāran yurīdu 'an yanqaddā (...) ammā s-safinatu fa-kānat li-masākina ya'malūna fi l-baḥri fa-'aradtu 'an 'a'ibahā (...) wa-'ammā l-ḡulāmu fa-kānā 'abawāhu mu'minayni fa-ḥašinā 'an yurhiqahumā ṭuḡyānan wa-kufra (...) wa-'ammā l-ḡidāru fa-kāna li-ḡulāmayni yatīmayni fi l-madīnati wa-kāna taḥtahū kanzun lahumā (Q 18:71, 74, 77, 79–82)*

“They departed until they embarked upon a ship, he made a hole in it (...) so they departed until when they met a boy he slew him (...) so they departed until when they reached the people of the city, they asked the people for food, but they refused to receive their hospitality. There they found a wall about to tumble down, and so he set it up (...). As for the ship, it belonged to poor people, who toiled upon the sea and I wish to damage it (...). As for the boy, his parents were believers and we were afraid he would impose on them insolence and unbelief (...). As for the wall, it belonged to two orphan boys in the city and under it was a treasure belonging them (...).

Q 18:71–82 is identified by Ibn Hišām as a case where *'ammā* is used as *ḥarf taḥṣīl* “particle indicating elaboration.”<sup>64</sup> However, as I argued previously, even after omission of the particle *'ammā* the topics treated in the discourse are still elaborated in verses 79–81. Moreover, the information referred to by the *'ammā*-clauses may be integrated with other sentences. For example, the boy is mentioned first in the sentence *fa-nṭalaqā ḥattā 'idā laqiya ḡulāman fa-qatalahu* and again in *wa-'ammā l-ḡulāmu fa-kānā 'abawāhu mu'minayni fa-ḥašinā 'an yurhiqahumā ṭuḡyānan wa-kufra*. It seems possible to combine these two sentences as *\*fa-nṭalaqā ḥattā 'idā laqiya ḡulāman kāna 'abawāhu mu'minayni fa-ḥašinā 'an yurhiqahumā ṭuḡyānan wa-kufra* “so they departed until they met a boy whose parents were believers and we were afraid he would impose on them insolence and unbelief so he killed him.”

From a discourse point of view, such integration might be grammatically and semantically possible, yet it could create a cumbersome and complex discourse with excessive information that the listener or reader could not follow. In contrast to the cases analysed in sections 3.1 and 3.2, where the discourse units are shorter, I consider this group to consist of longer and elaborated units, therefore here the particle *'ammā* has three functions: first, it can be regarded as a grammatical device used to promote and to code a specific entity from a list of potential topics; furthermore, the topicalised noun returns the discussion to a previously mentioned theme. Second, it serves as a particle that organises the topics linearly, while the same syntactic structure is maintained; that is, the topic is placed in the initial position, followed by the focus. Third, *'ammā* indicates an additive relation; that is, each clause preceded by *'ammā* adds information about one of the topics mentioned previously in the unit.

Thus, in Q 18:71–82 the discourse unit starts with verse 71, where the theme is the ship that was burned; then in verse 74 the theme changes to the boy who was killed, and in verse 77 the theme is the wall which was about to tumble down. Through the particle *'ammā* the discussion in verses 79–82 reverts first to the ship, then to the boy and finally to the wall.

<sup>64</sup> Ibn Hišām 1969, vol. 1, p. 58.



(13) فَإِنْ أَعْرَضُوا فَقُلْ أَنْذَرْتُكُمْ صَاعِقَةً مِثْلَ صَاعِقَةِ عَادٍ وَتَمُودَ إِذْ جَاءَتْهُمْ الرُّسُلُ مِنْ بَيْنِ أَيْدِيهِمْ وَمِنْ خَلْفِهِمْ أَلَّا تَعْبُدُوا إِلَّا اللَّهَ قَالُوا لَوْ شَاءَ رَبُّنَا لَأَنْزَلَ مَلَائِكَةً فَإِنَّا بِمَا أُرْسِلْتُمْ بِهِ كَافِرُونَ  
فَأَمَّا عَادٌ فَاسْتَكْبَرُوا فِي الْأَرْضِ بِغَيْرِ الْحَقِّ وَقَالُوا مَنْ أَشَدُّ مِنَّا قُوَّةً (...) فَأَرْسَلْنَا عَلَيْهِمْ رِيحًا صَرْصَرًا فِي أَيَّامٍ نَحْسَاتٍ لِنُذِيقَهُمْ عَذَابَ الْخِزْيِ فِي الْحَيَاةِ الدُّنْيَا (...) وَأَمَّا ثَمُودُ فَهَدَيْنَاهُمْ فَاسْتَحَبُّوا الْعَمَى عَلَى الْهُدَى فَأَخَذَتْهُمْ صَاعِقَةُ الْعَذَابِ الْهُونِ بِمَا كَانُوا يَكْسِبُونَ

*fa-'in 'a'radū fa-qul 'andartukum ša'iqatan miṭla ša'iqati 'ādīn wa-tamūda*  
*'id ḡā'athumu r-rusulu min bayni 'aydihim wa-min ḡalfihim 'allā ta'budū 'illā llāha qālū law šā'a*  
*rabbunā la-'anzala malā'ikatan fa-'innā bi-mā 'ursiltum bihī kāfirūna*  
*fa-'ammā 'ādun fa-stakbarū fī l-'arḍi bi-ḡayri l-ḡaqqi wa-qālū man 'ašaddu minnā quwwatan (...)*  
*fa-'arsalnā 'alayhim riḡan šaršaran fī 'ayyāmin naḡisātīn li-nuḡḡiqahum 'adāba l-ḡizyi fī l-ḡayāti d-dunyā*  
*(...) wa-'ammā tamūdu fa-hadaynāhum fa-staḡabbū l-'amā 'alā l-hudā fa-'aḡadathum ša'iqatu*  
*l-'adābi l-hūni bi-mā kānū yaksibūna (Q 41:13–17)<sup>65</sup>*

“But if they turn away, say [to them]: I have warned you of a thunderbolt like the thunderbolt which overtook ‘Ād and Tamūd when the Messengers came to them, from before them and behind them (saying): Worship none but Allāh. They said: If our Lord had so willed, He would surely have sent down the angels. So indeed! We disbelieve in that with which you have been sent. As for ‘Ād, they were arrogant in the land without right, and they said: Who is stronger than we in might? Did they not see that God who created them was mightier in strength than them? And they denied our signs. So we sent upon them furious wind in days of ill fortune that we might let them taste the chastisement of degradation in the present life. And as for Tamūd, we guided them but they preferred blindness over the guidance, so the thunderbolt of the chastisement of humiliation seized them for what they used to earn.”

The discourse unit in Q 41:13–17 is composed of two parts: in Q 41:14 ‘Ād and Tamūd are cited as an example of people committing sins because they denied the calls of the divinely appointed prophets, saying that had God willed to send messengers to them, He would have made angels descend from heaven, but the prophets are human like the people, therefore they will never acknowledge them. In response to their disbelief, a thunderbolt was hurled at them. The second part of this unit (verse 15) elaborates the sins of ‘Ād and Tamūd and how God punished them. The structure of this discourse unit might indicate that *'ammā* first codes the two connected entities ‘Ād and Tamūd as topics and restores the discussion to them; secondly, it implies an additive relation because the purpose of the clause preceded by *'ammā* is to add information about ‘Ād and Tamūd.

(14) فَلَوْلَا إِنْ كُنْتُمْ غَيْرَ مَدِينِينَ تَرْجِعُونَهَا إِنْ كُنْتُمْ صَادِقِينَ  
فَأَمَّا إِنْ كَانَ مِنَ الْمُفْرَرِينَ فَرْوُحٌ وَرِيحَانٌ وَجَنَّةُ نَعِيمٍ  
وَأَمَّا إِنْ كَانَ مِنَ أَصْحَابِ الْيَمِينِ فَسَلَامٌ لَكَ مِنْ أَصْحَابِ الْيَمِينِ  
وَأَمَّا إِنْ كَانَ مِنَ الْمُكَذِّبِينَ الضَّالِّينَ فَنُزُلٌ مِّنْ حَمِيمٍ وَتَصْلِيَةٌ جَهِيمٍ

*fa-law-lā 'in kuntum ḡayra madīnīna tarḡi'unahā 'in kuntum šādiqīna*  
*fa-'ammā 'in kāna mina l-muḡarrabīna fa-rawḡun wa-rayḡānun wa-ḡannatu na'imīn*

<sup>65</sup> A similar case is Q 69:4–5.

*wa-'ammā 'in kāna min 'aṣḥābi l-yamīni fa-salāmun laka min 'aṣḥābi l-yamīni*  
*wa-'ammā 'in kāna mina l-mukaddibīna d-dāllīna fa-nuzulun min ḥamīmin*  
*wa-taṣṭiyatu ḡaḥīmīn* (Q 56:86–94)

“Then why do you not, if you are exempt from the reckoning and recompense, bring back the soul (to its body), if you speak truly? Then, if he (the dying person) be of those brought near to Allāh, there is for him rest and provision, and a garden of delights. And if he (the dying person) be of those on the right hand, then peace be upon him, those on the right hand. But if he (the dying person) be of the denying and went astray, then for him is entertainment with boiling water. And burning in Hellfire.”

Sura 56 concerns three themes: the hereafter, belief in God and refutation of the disbelievers' suspicions about the Qur'ān. The people will be divided into three classes: the righteous people, those who denied the hereafter and persisted in disbelief and polytheism, and those foremost in doing righteous good deeds. The reward and punishment of the people who belong to these groups is described in detail in verses 7–56. Verses 57–74 present several arguments, each attesting to divine omnipotence in human life: making the rain fall from the clouds, and making the trees grow. Verses 77–80 then treat the significance of the Qur'ān. Verses 83–87 describe the last moments of life, when the people surrounding the dying man are asked why they do not intervene when a dying person's soul reaches the throat. Looking at the dying person, they see that they can do nothing but note that life and death depend on Divine Will, and they know that the same fate is in store for all of them. Verses 88–94, which start with *'ammā*, sum up, and thus return the discussion to the points discussed in the preceding verses, namely the state of the three groups (mentioned in verse 7) on Judgment Day. Thus the differences are depicted among human dispositions at the time of death, with the reflection that some people pass away in the utmost serenity, peace of mind and happiness. Some others depart the mundane world with anxiety and horror when they see Hellfire.

The repetition of *'ammā* three times may also be explained in that this discourse particle is used to organise the topics linearly, which enables the listener or the reader easily to follow the three topics to which the discourse refers. At the same time, it establishes an additive relation by implying that the clauses preceded by *'ammā* add further information regarding the three groups mentioned at the beginning of the sūra.

(15) فَأَمَّا الْيَتِيمَ فَلَا تَقْهَرْ وَأَمَّا السَّائِلَ فَلَا تَنْهَرْ وَأَمَّا بِنِعْمَةِ رَبِّكَ فَحَدِّثْ

*fa-'ammā l-yatīma fa-lā taqḥar wa-'ammā s-sā'ilā fa-lā tanḥar wa-'ammā*  
*bi-ni'mati rabbika fa-ḥaddiṭ* (Q 93:9–11)

“As for the orphan, do not oppress him, and as for the beggar, scold him not, and as for the Lord's blessing, declare it.”

Q 93 makes a causal relation between verses 6–8 and verses 9–11. Muḥammad is comforted when told that God has not abandoned him. To prove it, three attestations (formulated as questions) of God's graces granted to Muḥammad are mentioned: Did He not find you an orphan and provide you shelter? And He found you wandering and He guided you? And found you in need and made you prosperous? Consequent to this information, verses 9–10 give the Prophet three important instructions that are linearly organised.<sup>66</sup>

<sup>66</sup> This function of *'ammā* is also exhibited in Q 12:41.

## 3.4. 'ammā marks a shift in topic

Q 89:15–16 is classified in the last category, where 'ammā introduces a new discourse referent:

(16) فَأَمَّا الْإِنْسَانُ إِذَا مَا ابْتَلَاهُ رَبُّهُ فَأَكْرَمَهُ وَنَعَّمَهُ فَيَقُولُ رَبِّي أَكْرَمَنِ وَأَمَّا إِذَا مَا ابْتَلَاهُ فَقَدَرَ عَلَيْهِ رِزْقَهُ فَيَقُولُ رَبِّي أَهَانَنِ

*fa-'ammā l-'insānu 'idā mā btalāhu rabbuhū fa-'akramahu wa-na'amahu  
fa-yaqūlu rabbī 'akramani wa-'ammā 'idā mā btalāhu fā-qadara 'alayhi rizqahū fā-yaqūlu rabbī 'ahānani*  
(Q 89:15–16)

“As for man, when his Lord tries him by giving him honour and gifts, then he says: My Lord has honoured me. But when He tries him, by straitening his means of life, he says: My Lord has humiliated me!”

Sura 89 verses 6–19 refers to 'Ād and Tāmūd, two ancient nations that went astray and to Pharaohs who were powerful, but transgressed and were cruel, and because of their action God poured on them a scourge of diverse chastisements. Following verses 5–13, which warn the oppressors and threaten them by alluding to divine punishments, verses 15–16 refer to the divine trials/tests of the people's morale. Yet it would be correct to say that only the first 'ammā clause marks the shift to a new topic or referent, while the second 'ammā indicates the contradiction between those who have wealth and position and power from their God, and therefore are filled with pride and say God has honoured them, and those who fail to obtain wealth and power, and therefore say that God has humiliated them.

To conclude section 3, the following table outlines the functions of 'ammā, the distribution of each function and its structural features.

Function	Number of verses in which they occur	Thematic context	Structural features
1. 'ammā denotes contradiction	17	Judgment Day (11 verses)	A statement regarding Judgment Day is followed by two 'ammā-clauses describing the punishment of the unbelievers and the reward of the believers.
		Various themes (6 verses)	There is a statement followed by two 'ammā-clauses.
2. 'ammā denotes adversative relation	2	No unifying theme	Only one 'ammā-clause, which stands in opposition to what was previously said.
3. 'ammā organises the topics linearly and indicates an additive relation	6	No unifying theme	The discourse unit is extended, loaded with details. 'ammā returns the discussion to a previously mentioned topic. The clauses preceded by 'ammā add further information regarding these topics.
4. 'ammā marks a shift in the topic	1	Divine trial	No specific feature.

## Conclusion

The particle *'ammā* was treated extensively by the traditional Arab grammarians. They categorised it as a particle which grammatically functions as the *ḥarf bida'* “particle indicating the start of a new speech”; the *ḥarf tafṣīl* “particle indicating elaboration”; and the *ḥarf tawkid* “particle denoting emphasis.” In modern treatments *'ammā* is mostly identified as a topicaliser particle causing the topic to stand in initial position. *'ammā* is not a neglected particle in the grammatical descriptions, yet none of them focuses on related issues which must be examined for a full understanding of the function of *'ammā*. Examples are the discourse type and discourse structure in which *'ammā* occurs, the thematic context in which *'ammā*-clauses appear, and why a topicalisation process is needed.

In this study, I refer to *'ammā* as a discourse particle. *'ammā* stands in initial position in the clause, linking two or more successive discourse units. In addition, *'ammā* can be removed without changing the grammatical structure of its host sentence, and the relation it signals remains available to the listener/reader (see example 6). But *'ammā* has its own syntactic structure, where the topic comes first and the focus later.

I was impelled to investigate *'ammā* by traditional grammarians calling them “particles indicating elaboration” (*ḥarf tafṣīl*), indicating by this term a kind of relation. However, as I saw it, this relation is obvious, namely the listener/reader does not need this particle to identify the elaborative relation. Therefore, the point of departure of this article was that *'ammā* must be examined in a discourse perspective in order to reveal its function, or more precisely the relation it indicates. Thus the contribution of this study may be summarised as follows:

During the analysis, I sought a correlation between the thematic context and the function of *'ammā*. I found that this discourse particle occurs in connection with various themes, but the most common one is Judgment Day (11 verses out of 26). I did, however, find that each function appears in a specified unit structure.

1. There is a short statement regarding Judgment Day followed by two *'ammā*-clauses presenting the contrasting states of the believers and the unbelievers on that day.
2. There is an extended unit where the particle *'ammā* focuses attention on previously mentioned topics while it organises them, and at the same time, the clause preceded by *'ammā* gives further information regarding these topics.
3. There is only one *'ammā* sentence in the discourse unit which stands in adversative relation to the previous clause.
4. *'ammā* starts a new discourse unit which thematically is not connected to what has been said before.

*'ammā* is first and foremost regarded as a discourse particle functioning as a cohesive device which links the ideas expressed in the discourse unit in a logical and sequenced order while decoding three types of relation between the unit parts—a contrastive, adversative and additive relation.

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# The Camel Passing through the Eye of the Needle: A Qur'anic Interpretation of the Gospels

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## Abstract

*The metaphor of the camel passing through the eye of the needle is found in the Synoptic Gospels (Matthew 19:24, Mark 10:25, Luke 18:25) and the Qur'an (7:40). The Gospels seem to suggest that it is easier for a camel to pass through the eye of a needle than for a rich person to enter the Kingdom of Heaven. The Qur'an, on the other hand, puts the metaphor in the context of disbelievers who are arrogant (istakbarū) toward God's signs. At the outset, it would seem that the passage's contexts in the Gospels and the Qur'an are different; however, through a closer analysis of the keywords, there are textual parallels that can be extracted from both texts and go beyond simply the use of this analogy in common, as previous scholars have thought. For instance, the rich man in the Gospels is asking about inheriting eternal life, while the Qur'an also discusses eternal life and inheritance in the same context. These and several other textual parallels suggest that the Qur'an is alluding to the same context for the metaphor as the Gospels do.*

**Keywords:** Intertextuality, Qur'an, Gospels

## Introduction

In this paper, the metaphor of the camel passing through the eye of the needle is compared between the Synoptic Gospels (Matthew 19:24, Mark 10:25, Luke 18:25) and the Qur'an (7:40). According to the Qur'an, the passage is as follows:

Truly those who deny Our signs and wax arrogant against them (*istakbarū*), the gates of Heaven (*al-samā'*) shall not be opened for them, nor shall they enter the Garden till the camel (*al-jamal*) pass through the eye of the needle. Thus do We recompense the guilty! [Qur'an 7:40]<sup>1</sup>

In this passage, it appears that the Qur'an is stating that for those who are arrogant (*istakbarū*) toward God's signs, the gates of heaven will neither be opened to them, nor will they enter the garden, until the camel passes through the eye of the needle. Eric Bishop discusses the correlation between the Qur'anic verse and Jesus' sayings in the Synoptic Gospels.<sup>2</sup> He observes that possibly

<sup>1</sup> The Qur'anic translation used in this article is based on *The Study Quran*, unless otherwise noted. Refer to Nasr 2015.

<sup>2</sup> Bishop 1941, pp. 354–359.

the only direct quotation in the Qur'an from the Gospels is from the passage in which the gates of heaven and the Kingdom of God are discussed.

<sup>23</sup> Then Jesus said to his disciples, "Truly I tell you, it is hard for someone who is rich (*plousios*) to enter the kingdom of heaven. <sup>24</sup> Again I tell you, it is easier for a camel to go through the eye of a needle than for someone who is rich (*plousios*) to enter the kingdom of God." [Matthew 19:23–24]

However, there is a striking difference, in spite of the similarities between the Qur'anic and biblical texts: the Gospels talk about a rich person, whereas the Qur'an talks about those who arrogantly disbelieve in God's signs. If we are to accept that the Qur'an is a quotation of (or an allusion to) the biblical text, then why does it appear to talk about different types of people, unless the Qur'an is equating those who arrogantly disbelieve in God's signs with the rich? A careful linguistic examination of the Gospels and the Qur'an reveals an interesting relationship, which might signify that the Qur'an interpreted the Gospel, either Greek or Aramaic,<sup>3</sup> when quoting this verse, without much changing the subject matter, whether it relates to the rich or the arrogant. Moch Ali noted a Semitic intertextual relationship between the Aramaic Gospel and the Arabic Qur'an when he referred to this quotation from the Gospel in the Qur'an.<sup>4</sup> Although he recognised that the Qur'an in this verse refers to those who arrogantly disbelieve in God's signs, while the Gospel speaks of someone rich,<sup>5</sup> he could not find a relationship between them when making the comparison. Accordingly, Ali concludes that the Qur'an is not quoting the Gospel, but only using a similar metaphor. This paper shows that this is not necessarily the case, because there is a linguistic relationship between the rich man, as referred to by the Greek Gospels (*plousios*) or the Aramaic Gospels (*tyr*) and the arrogant disbelievers of God's signs in the Arabic Qur'an. In addition, the Qur'an may have used Tatian's Diatessaron as a road map, although the evidence for this proposition is still inconclusive.

Some scholars suggest that the Qur'anic source for the Gospel quotation of the camel passing through the eye of the needle might have been an Arabic or Syriac translation of Christian literature or oral tradition.<sup>6</sup> Bishop, for example, in his analysis of the passage, raises the possibility that the Qur'an quotes from the Syriac tradition that spread through Arabia.<sup>7</sup> He specifically suggests that the Qur'anic source could have been Tatian's (d. c. 180) Syriac Diatessaron.<sup>8</sup> He observes that the Arabic translation of the passage in Tatian's Diatessaron uses the same phraseology as the Qur'an, which is different from known renditions of the Arabic Gospels.<sup>9</sup> The "eye of the needle" is translated as "*samm al-khiyāt*" in the Arabic Diatessaron, which coincides with the phraseology in the Qur'an, but is different from the Arabic translations of the Gospels. Another point that Bishop takes into consideration is that the term "passing through," which in the

<sup>3</sup> The Aramaic Gospel referred to in this paper is the *Peshitta*, unless otherwise noted later, when discussing the Old Syriac version and Tatian's Diatessaron.

<sup>4</sup> Ali 2008, pp. 72–89.

<sup>5</sup> Ali 2008, pp. 72–89.

<sup>6</sup> See Bell 1937, vol. 1, p. 141. See also Bishop 1941, pp. 358–359. See also El-Badawi 2013, p. 236.

<sup>7</sup> Bishop 1941, p. 358.

<sup>8</sup> The Diatessaron is Tatian's compiled Gospel, in which he attempts to harmonise all four Gospels together. It is believed to have been originally written in Syriac (c. 160–175), then translated into Arabic centuries after Muḥammad's death. The existing Arabic translation is attributed to Abū al-Faraj 'Abdullāh ibn al-Ṭayyib (d. 1043).

<sup>9</sup> Bishop 1941, p. 356.

Qur'an is "*yaliḥ*," as in the Arabic Diatessaron, differs from the Arabic translations of the Gospels, which typically use the term "*dukhūl*" or "*murūr*."<sup>10</sup> Bishop suggests that even though Tatian's Diatessaron was translated into Arabic centuries after Muḥammad, it might not necessarily have been influenced by Qur'anic phraseology, since that phraseology did not influence the Arabic translations of the Gospels.<sup>11</sup> His hypothesis is that it is possible that the Qur'anic sources were from Syriac traditions, having come through Tatian's Diatessaron.<sup>12</sup> However, I think this argument is somewhat weak.

Bishop seems to imply that since the Qur'an did not influence the Arabic translations of the Gospels, it might not have influenced the Arabic translation of Tatian's Diatessaron.<sup>13</sup> However, if there was an oral tradition of Tatian's Diatessaron that might have influenced the Qur'anic phraseology, why did it not, in itself, influence Arabic translations of the Gospels? The argument can go both ways and seems self-defeating. It is important to note that the term "*yaliḥ*" meaning "to pass through" is used in the Arabic translation of Tatian's Diatessaron, in the passage concerned with passing through the eye of the needle, in place of the Greek terms "*dielthein dia*" (Matthew 19:24, Mark 10:25) or "*eiselthein dia*" (Luke 18:25), where it states "*innahu sahl 'ala al-jamal an yaliḥ samm al-khiyāṭ min an yadkhul al-ghany malakūt Allāh*" (Diatessaron 29:2). However, where the Arabic translation of Tatian's Diatessaron quotes Matthew 7:13 on entering the narrow gate, it also uses the term "*lujjū*" for the Greek term "*eiselthate*" (Diatessaron 10:32), even though there is no direct phraseology that could link this passage in the Gospel and the Qur'an using the term "*yaliḥ*."

Emran el-Badawi notes the Qur'an's possible re-articulation of the Christian Syriac text or oral tradition, although he acknowledges the difference between the Gospel's warning about the rich and the Qur'an's about those who reject God's signs in arrogance.<sup>14</sup> The Qur'an and its possible relation to Syriac has long been debated. Arthur Jeffery in his *The Foreign Vocabulary of the Qur'an*, casts light on possible loanwords that the Qur'an took from Syriac, through the Christian milieu in Arabia.<sup>15</sup> Günter Lüling and Christoph Luxenberg have suggested possible Syriac origins for the Qur'an.<sup>16</sup> This paper illustrates that the Qur'anic allusion to the Gospels on the subject of the camel passing through the eye of the needle is likely an engagement with or based on Tatian's Diatessaron, and that the Qur'an is interpreting its context involving the rich man without necessarily much changing the subject matter.

The method of intertextual polysemy that is applied in this study was also used in my earlier work relating the *Qiblah* with the *Shema*.<sup>17</sup> It is a semantic method in which the same or similar usage of words and meanings between texts and possibly contexts may constitute an allusion. This paper illustrates the Qur'anic engagement with the Synoptic Gospels.

<sup>10</sup> Bishop 1941, p. 357.

<sup>11</sup> Bishop 1941, pp. 357–358.

<sup>12</sup> Bishop 1941, p. 357.

<sup>13</sup> Bishop 1941, pp. 357–358.

<sup>14</sup> El-Badawi 2014, p. 188.

<sup>15</sup> Jeffery 1938.

<sup>16</sup> See Lüling 1974. See also Luxenberg 2000.

<sup>17</sup> Galadari 2013a, pp. 165–194. Also consider Galadari 2013b, pp. 35–56.

### Points of intertextuality

I identify 11 points of intertextuality between the Qur'anic passage on the camel passing through the eye of the needle and its account in the Gospels. The first intertextuality is obviously the similar analogy used.

The Greek term used in Matthew 19:23–24, Mark 10:25 and Luke 18:25 to mean “rich” is “*plousios*” or “*plousion*,” which refers to abundance and wealth, although its root word means “plenty,” “increase,” and “abundance”.<sup>18</sup> Etymologically, the Greek “*plousios*” is related to “*ploutos*,” which means “wealth”.<sup>19</sup> The term “*plousios*” is related to “*polus*,” meaning “to be made full,”<sup>20</sup> or “*polys*,” meaning “many.” The term “*polys*” is also used in the preceding verse in Matthew (19:22), where the Gospel reports that the man had many (*polys*) possessions. The term used in the Qur'an to mean “arrogant” is “*istakbarū*” with its root in “*kbr*,” which etymologically also means “to increase” and “greatness”.<sup>21</sup> In Aramaic, the term “*kbr*” also means “enlarge,” “multiply,” and “abundance”, as the Syriac term “*kbyr*” is also used to mean “richness” and “wealth”,<sup>22</sup> although the Peshitta uses the term “*tr*” to mean “rich” in this verse, which is cognate to the Hebrew and Arabic “*ashr*.” Though the Hebrew Bible uses the term “*ashr*” also to mean “rich”, the root of the term “*shr*” means “abundance”,<sup>23</sup> and the Arabic “*ma'ashar*” also means “multitude”.<sup>24</sup> Therefore, the root definition of “*shr*” also resembles “*plousios*”, and contains the meaning of abundance found in “*kbr*”.

Morphological derivations of “*plousios*” are sometimes used by the Septuagint in connection with stubbornness (or perhaps arrogance). The Septuagint translates “*she'on alizim hadal*” (“the noise of the jubilant has ceased”) in Isaiah 24:8 as “*pepautai authadia kai ploutos asebon*” (“ceased the self-willed stubbornness and riches of the impious”). There are many hypotheses on the etymology of the Hebrew “*aliz*,” one of which suggests its Arabic cognate to be “*ghalīz*” (“thick”), with the meaning “to be proud”.<sup>25</sup> Although this seems improbable, the Septuagint translators appear to have understood the noise of the jubilant as people who are arrogant with riches. Similarly, the Septuagint uses “*plousioi*” in Isaiah 5:14 for those who are “*she'onah wa-'aliz*” (“[who] revel and exult her [Sheol]”).

The Hebrew Bible term typically used for “greatness”, as in the Arabic term “*kbr*”, is “*gd*l”. In Esther 1:4, the Septuagint translates the term “*gedolat*” for greatness as “*ploutou*.” One might assume, since the passage is speaking of riches from the Hebrew term “*osher*,” which is also translated as “*ploutos*,” that the greatness referred to in this specific passage is greatness of wealth. However, the Septuagint also translates “*gedulat*” in Esther 10:2 as “*plouton*” (riches), although that context would not necessitate such an understanding. Nevertheless, it must be noted that in this passage, the one given “*gedulat*” (*plouton*) is Mordecai, and as such, the translators did not consider the term “*plouton*” (riches) in this instance as arrogance.

<sup>18</sup> Danker 2000, p. 831.

<sup>19</sup> See Kittel *et al.* 1964, vol. 6, p. 318.

<sup>20</sup> Kittel *et al.* 1964, vol. 6, p. 319. See also Danker 2000, p. 832.

<sup>21</sup> Ibn Manẓūr 1994, vol. 5, pp. 125–131.

<sup>22</sup> See Smith 1902, p. 203. See also Brown *et al.* 2000, p. 460.

<sup>23</sup> Botterweck and Ringgren 1977, vol. 11, pp. 417–418, on “*ashr*.”

<sup>24</sup> Ibn Manẓūr 1994, vol. 4, p. 457.

<sup>25</sup> Botterweck and Ringgren 1977, vol. 1, pp. 292–293, on “*zl*.”

The typical term for a “rich person” in Arabic is “*ghany*,” even though the term “*kbr*” also means “greatness” and “abundance,” which can be understood as “*plousios*” in Greek, therefore meaning “rich.” On that note, it is interesting that the Qur’an uses a morphological wordplay on the terms “*ghany*” and “*kbr*” in a few passages that follow the metaphor of the camel passing through the eye of the needle (Qur’an 7:48), as this is the second point of intertextuality. However, in 7:48, the term “*mā aghnā*” meaning “to no avail,” is used, which shares the same root as “*ghany*.” As there seems to be a possible intertextual relationship between Qur’an 7:40 and 7:48, one might question whether the term “*istakbarū*” or “*tastakbirūn*” could also be an allusion to the “*ghany*,” which means a “rich person.” The Qur’anic term “*mā aghnā*” could also hold the meaning “it is not enriching.” As such, Qur’an 7:48 can be translated as “it does not enrich (*mā aghnā*) you, your gathering and with what you were enriching yourselves (*tastakbirūn*).” The Qur’anic verse in question is usually understood and translated as follows:

And the inhabitants of the Heights will call out to men whom they know by their marks, “Your accumulating has not availed you [has not enriched you] (*mā aghnā*), nor has your waxing arrogant [enriching yourselves]<sup>26</sup> (*tastakbirūn*). [Qur’an 7:48]

The third point of intertextuality between the rich man’s question in the Gospels and the Qur’an may be the presence of the term “eternal,” which in Greek is “*aiōnion*” for eternal life (Matthew 19:16, 19:29, Mark 10:17, 10:29, Luke 18:18, 18:29). The Greek term “*aiōnion*” is comparable with the Arabic term “*khālidūn*,” which also means “eternal.”<sup>27</sup> In each Gospel, where the metaphor of the camel passing through the eye of the needle is mentioned, the term “eternal” is used twice within the same context. In the Qur’an, the term “*khālidūn*” for “eternal” is also repeated twice within the context of the metaphor of the camel passing through the eye of the needle (7:36, 7:42).

The fourth point of intertextuality in the rich man’s question and context of this episode is the term for “inheritance.” The rich man asks Jesus what he must do to “inherit” eternal life, using the Greek term “*klēronomēsō*” or the Aramaic term “*irt*” for the word “inherit” in the Gospels of both Mark and Luke (Mark 10:17, Luke 18:18). Although this term is not part of the rich man’s question in the Gospel of Matthew, the term “inherit” (*klēronomēsēi/nirat*) is used in the same context (as the rich man’s question), when describing those who will inherit eternal life (Matthew 19:29). The Septuagint, in some instances, uses morphological variants for the term “*klēronomeō*” to translate the Hebrew “*yrtsh*,” which is cognate to the Aramaic “*irt*” and the Arabic “*yrtsh*,” meaning “inherit” (for example, Psalm 37:29). In the Qur’anic text, after stating that those who are arrogant (*istakbarū*) toward God’s signs will not enter heaven until the camel passes through the eye of the needle, it states that heaven is “inherited” (*ūrithtumūhā*) by those who are worthy (Qur’an 7:43).

In the fifth point of intertextuality, the Qur’an mentions that the gates of heaven (*al-samā*) do not open to people who arrogantly disbelieve in God’s signs until the camel passes through the eye of the needle (Qur’an 7:40). It is important to distinguish between the Qur’anic terms for heaven, which are “*jannah*,” meaning “a hidden garden,” and “*al-samā*,” meaning “sky”

<sup>26</sup> Perhaps understood as enriching one’s ego (that is, arrogance).

<sup>27</sup> Ibn Manẓūr 1994, vol. 3, pp. 164–165.



(heaven). When relating how Jesus states that it is difficult for a rich person to enter the Kingdom of Heaven, the Gospel of Matthew uses the Greek term "*ouranos*" or the Aramaic "*shmaya*" (Matthew 19:23), which is comparable to the Arabic "*al-samā*" used in the Qur'an.<sup>28</sup> Tatian's Diatessaron also uses Matthew's rendition in this narrative. As such, it is difficult to judge whether or not the Qur'an used Tatian's Diatessaron or the Gospel of Matthew directly, since the other Gospels refer to "the Kingdom of God", rather than to "Heaven."

The Gospel of Luke relates the parable of the Rich Fool (12:13–34). There are several points of intertextuality between this parable and the rich man seeking eternal life in the Synoptic Gospels. The parable of the Rich Fool immediately precedes Tatian's narration of the camel passing through the eye of the needle in the Diatessaron (28:33–41). The first point of intertextuality is that in both cases, it is a rich man. The second point is that the rich man seeks to "inherit" eternal life, while in the parable of the Rich Fool, the subject matter is inheritance in the material world (Luke 12:13, 12:20). The third point is that the rich man seeking eternal life is asked to sell all his possessions and give to the poor so that he receives treasure in heaven; in the parable of the Rich Fool, the same is requested in order to receive treasure in heaven (Luke 12:33). Establishing a relationship between the parable of the Rich Fool and the episode of the rich man seeking eternal life is important, because in the context of the parable of the Rich Fool, the Gospel relates that Jesus stated that no one can add an hour to his life (Luke 12:25), and hence one must not worry or be anxious. As such, the Gospel states that people who will go to heaven must not be afraid (Luke 12:32). Luke 12:40 continues that Jesus stated one must be ready for the coming of the hour.

Similarly, in the passages preceding the camel passing through the eye of the needle in the Qur'an, it is stated that when the time comes, a nation will not be able to add an extra hour to its span (7:34) and that those who do good and go to heaven shall neither fear nor be sad (7:35, 7:49). Those are the sixth and seventh points of intertextuality respectively. In addition, the term used for "fool" in the parable of the Rich Fool is the Greek "*aphrōn*", related to "*aphrōna*," which also means "arrogance", "pride", "ignorance", "cunning", and "sinfulness."<sup>29</sup> This meaning provides further intertextuality between the terms for being rich and for being arrogant, which in Arabic may be combined in the polysemous understanding of "*istikbār*." This is the eighth point of intertextuality between the Qur'an and the Gospel's narration of the rich man seeking eternal life. Furthermore, even the Aramaic term for "fool," "*khsyr ra'na*," may provide intertextuality with the Qur'an, which uses the terms "*khasirū anfusahum*" (7:9, 7:53) and "*al-khāsirīn*" (7:23) in the context of the camel passing through the eye of the needle.

Just as the materialism of this world seems to be condemned in the episode of the rich man seeking eternal life, so it is also in the parable of the Rich Fool.<sup>30</sup> The Qur'an seems to condemn

<sup>28</sup> This might suggest the popularity of the Gospel of Matthew among Arab Christians, since the other Synoptic Gospels use the Kingdom of God instead of the Kingdom of Heaven (sky) in this episode. It has also been suggested by Bishop (1941, p. 354) that the Gospel of Matthew was perhaps more popular among Arab Christians than the other Gospels; see also El-Badawi, 2014, pp. 7–8. There is a possibility that since the Gospel of Matthew was likely to have originally been written in Aramaic, it was more accessible to the early Syriac churches, and eventually was conveyed through them to Arab Christians.

<sup>29</sup> See Kittel *et al.* 1964, vol. 9, pp. 221, 234–235. See also Danker 2000, p. 159.

<sup>30</sup> There is a general hostility against wealth in the Synoptic Gospels, and especially so in the Gospel of Luke. See Schmidt 1987, pp. 135–162.

worldly life (7:51) in the same context as the metaphor of the camel passing through the eye of the needle. It is perhaps interpreting the Gospel's message against worldly wealth as a condemnation of worldly life in general, and this is perhaps the ninth point of intertextuality. It is also interesting that in the passages that follow the camel passing through the eye of the needle in the Qur'an, there is discussion of some previous messengers, and how some of their people were arrogant (or rich) (*istakbarū*) (7:75–76, 7:88). One such story is that of Hūd. The Qur'an relates that his people accused him of being a fool (*safāhah*, 7:66), while he denied it (7:67). This passage might reflect the interpretation that the Qur'an is trying to convey if we keep in mind the intertextuality with the story of the Rich Fool in the Gospel of Luke. In the parable of the Rich Fool, the fool is the one who stores up the riches of this life and not of the next, and so the Qur'an appears to portray that those who store up riches in this life, as exemplified by Hūd's people (7:69), are the ones who are fools, and not Hūd.

In a similar fashion, when Qur'an 7:89 narrates the story of Shu'ayb, it shows how Shu'ayb prays for God to open between the believers and the arrogant among his people (*istakbarū*) (7:88), for God is the best of openers, paralleling the opening of the gates of heaven, as narrated previously. The arrogant ones claim that if they follow Shu'ayb, they will be the losers (*khāsirūn*, 7:90). The Qur'an later relates that those who did not follow Shu'ayb are as if they were not enriched (*yaghnaū*) in their residences, and that they are the ones who are the losers (*al-khāsirīn*). The story of Shu'ayb in these passages continues to allude to the parable of the camel passing through the eye of the needle, using specific vocabulary: "opening", "arrogant", "liars" (*kadhhabū*), "enrich" (*ghny*), and "losers."

There is yet another point of intertextuality between the Gospels and the Qur'an, which concerns the parable of the Rich Fool. Following that parable, Luke 12:35–48 relates how Jesus asked his disciples to be watchful in the house. The parable given in those passages seems also to be related to the parable of the Ten Virgins in Matthew 25:1–13 as, in both cases, the message conveyed is to be watchful and not fall asleep, because the master (or bridegroom) may come at any time. In both parables, the Greek term for wedding banquet (*gamon* or *gamous*) is used (Matthew 25:10, Luke 12:36). Furthermore, in both parables the message of keeping the lamps burning is conveyed (Matthew 25:1–10, Luke 12:35). The parable of the Ten Virgins also talks about those who are fools. The reason to be watchful and awake, according to these parables, and even according to the parable of the Rich Fool, is because the hour is unknown and the master (or bridegroom) could come at any time. This theme is also related to other passages in the Gospels, where the signs of the end of days are described, the hour is unknown, and people must be alert and not sleeping, because they do not know when the master will return (Matthew 24:36–44, Mark 13:32–37). Similarly, as a tenth point of intertextuality, the Qur'anic passages that follow the metaphor of the camel passing through the eye of the needle also convey a message of being watchful and awake, because the hour is unknown:

<sup>97</sup> Did the people of the towns feel secure from Our Might coming upon them by night, while they were sleeping? <sup>98</sup> Or did the people of the towns feel secure from Our Might coming upon them in broad daylight, while they were playing? <sup>99</sup> Did they feel secure from God's plotting? None feels secure from God's plotting, save the people who are the losers (*al-khāsirūn*).<sup>100</sup> Does it not serve as guidance unto those who inherited (*yarithūn*) the earth after its [earlier] inhabitants that, if We willed, We could smite them for their sins and set a seal upon their hearts such that they would not hear? [Qur'an 7:97–100]

The above Qur'anic passages seem to distinguish those who inherit (*yarithūn*) the earth from those others it had previously discussed, who inherit heaven. In a later passage of the same chapter in the Qur'an, it is emphasised that the hour is unknown even to the Prophet (7:187), which is similar to the understanding provided by the Gospels that not even the Son knows the hour (Matthew 24:36–44, Mark 13:32–37).<sup>31</sup> On the basis of these intertextualities, it may seem appropriate to interpret the passages of the Qur'an that discuss closing the gates of heaven and affirm that people who are arrogant (*istakbarū*) toward God's signs will not enter heaven until the camel passes through the eye of the needle as a textual allusion to the message provided in the Gospels. Accordingly, understanding how the term "*istakbarū*" is to be translated in the Qur'an would reflect this kind of textual allusion showing how the Qur'an interprets this parable.

The eleventh point of intertextuality is Qur'an 7:99–100, which talks about fools (*khāsirūn*) losing their inheritance resembling the Parable of the Rich Fool. In Luke 12:20, the narrator shows that the rich fool may lose his soul. The term "*khāsirūn*" in Qur'an 7:99 may also be referring to those who lose their soul, since within the same chapter, the Qur'an explicitly speaks on this matter (*khāsirū anfusihim*; 7:9, 7:53), and frequently describes the disobedient and disbelievers as those who are lost (*khāsirūn*; 7:23, 7:92, 7:99, 7:149, 7:178). Qur'an 7:92, for example, uses a play of words with a term rooted in "*ghny*" to show that it is the disbelievers who are not enriched (*yaghmnaw*), and therefore, the ones who have lost (*khāsirīn*).

Qur'an 7:94–102 moves along similar lines. Verses 7:95–98 speak of a time coming suddenly, when no one perceives it or while they are asleep or playing, like the hour described earlier with its parallels in Luke 12:35–48. Also, if the people do not lie (*kadhhabū*), the gates of heaven will be opened to them (Qur'an 7:96), while no one feels secure from God's plan except the losers (*al-khāsirūn*; 7:99). These warnings are given to those who inherit (*yarithūn*) the earth after its former people (7:100). This idea appears to show that the Qur'an shares the basic concepts from the parable of the Rich Fool in Luke in these passages, in that one cannot make plans for material inheritance.

The Qur'an continues with the story of Moses, in which the matter of inheritance is brought up in 7:128–129. However, here it is because Pharaoh and his people continued to be arrogant (*istakbarū*) about God's signs (7:133) and disbelieved (*kadhhabū*) them (7:136) that the earth was inherited (*awrathnā*) instead by the meek (7:137).

If the Qur'an refers to the Gospels' portrayal of the rich as a metaphor for those who are arrogant toward God's signs, especially when considering the polysemous possibilities of "*plousios*" and "*kbr*," then the condemnation of the rich in the Gospels would suggest a possible allusion to Psalm 31:18–19. In the narrations, discussed above, of the rich people and the parable of the Rich Fool, there are a few keywords and phrases that are noted: "abundance", "good things", and "storing up riches". The same concepts are found in Psalm 31:18–19, where God is described as storing up an abundance of His goodness for righteous people; this is not in a context of condemning rich people, but of condemning arrogance in those who lie and speak proudly against righteous people. Thus, the Qur'an seems to put the metaphor of the camel passing through the eye of the needle within such context.

<sup>31</sup> El-Badawi 2014, p. 236.

### The camel and the needle

As discussed, the Greek term “*plousios*” for “rich,” or for someone with abundant possessions, has been rendered in the Qur’an by the Arabic term “*istikbār*.” Both terms, in their respective languages, are polysemous and may hold the dual meanings “abundance” and “richness.” It is important to note that the Qur’anic chapter where the passages in question occur begins by stating that Satan’s sin was pride and arrogance, using the term “*takabbar*,” which is rooted in “*kbr*” (7:13). Satan’s sin, according to the Qur’an, is having an inflated ego (*kibar*). This gives us an appreciation of the style of the Gospels and the Qur’an. Perhaps this statement, in which both the Greek term “*plousios*” and the Arabic term “*kibar*”, meaning “abundance”, “plenty”, as well as “richness” occur, is conveying a message that people with large egos (*kibar*) are so large (*kabīr*) that it is in fact easier for a camel to pass through the eye of the needle than for them, because their egos are larger than a camel. The ego being bigger than a camel, so that it cannot enter through the eye of a needle, is what was also suggested by the Sufi Imām Aḥmad bin ‘Umar (d. 1221) as a symbolic exegesis for these Qur’anic passages in his *al-Ta’wīlāt al-najmiyyah fil-tafsīr al-ishārī al-ṣūfī*.

Carefully examining the term used in the Qur’an, it seems most probably to have been quoted from (or alluding to) the Gospels, using a lexical translation of what is perhaps perceived as the actual intended polysemous meaning. The Qur’an seems to interpret this parable as saying that it is not only people with great wealth who will find difficulty entering the kingdom of heaven, but also and especially people with great egos (that is, arrogance).

Abraham Geiger (d. 1874) suggests that the use of the metaphor of a camel passing through the eye of a needle seems to be derived from the Babylonian Talmud, which states that a person will not dream of things that are impossible.<sup>32</sup> The Babylonian Talmud gives examples of this concept, including:

Raba said, “You may know that it is so, for people are not shown in dreams [such impossibilities as] either a golden palm tree or an elephant going through the eye of a needle.”<sup>33</sup>

### Conclusion

According to the observations highlighted in this paper, it seems that the context of the Qur’anic usage of the camel passing through the eye of the needle is an interpretation of the same account in the Gospels, and more notably Tatian’s Diatessaron. Although some scholars have already come to the same conclusion based on a weak argument of similar phraseology between the post-Qur’anic Arabic Diatessaron and the Qur’an, that is unlikely to be the reason. Better evidence for the Qur’anic passage being based on Tatian’s Diatessaron is its interwoven engagement with different parts of the Gospels involving the rich, which Tatian’s Diatessaron sews together (Diatessaron 28–29); this especially relates to the Parable of the Rich Fool and the tale of the rich man asking Jesus about inheriting eternal life.

<sup>32</sup> Geiger 2012, pp. 52–53.

<sup>33</sup> *The Babylonian Talmud*, Berakhot 55b.

Though seemingly having different contexts—concerning rich people in the Gospels and arrogant disbelievers of God’s signs in the Qur’an—11 points of intertextuality have been identified here (some weaker than others). In summary, they are: i) the analogy of the camel passing through the eye of the needle, ii) the morphological wordplay in the Qur’anic passage between “*ghny*” (richness) and “*kbr*” (arrogance), iii) the parallel presence of the concept of eternal life, iv) the parallel presence of the concept of inheritance, v) the similar usage of the term heaven (*al-samā*), as in Matthew’s account and Tatian’s Diatessaron, vi) the idea, within the context of the Parable of the Rich Fool, that a person cannot add even an hour to his life, which is similar to how the Qur’an states that no nation will be able to add an hour, vii) that people who go to heaven shall not fear, as portrayed in the Qur’an and in the context of the Parable of the Rich Fool, viii) that the fool described in Luke is “*aphrōn*,” which can also mean “arrogant” and “proud”, as in the Qur’anic “*kbr*,” ix) the overall condemnation of worldly riches in these instances in the Qur’an and the Gospels (especially prevalent in Tatian’s Diatessaron, as it puts together parables involving rich people and the rich man asking Jesus about eternal life), x) that asking people to be watchful in the Qur’anic passage parallels the same message in the Parable of the Rich Fool, which in itself has parallels to the Parable of the Ten Virgins, and xi) that the Qur’anic description of those who lose their inheritance and their souls resembles that of the Rich Fool.

The Qur’an not only uses a similar analogy to the Gospels about the camel passing through the eye of the needle, but seems to be engaging with and interpreting the Gospel’s message in this context. The Qur’an interprets the rich people who have difficulty entering the kingdom of heaven as those who are arrogant “*istakbarū*” about God’s signs. The rich men who are condemned in the Gospels are apparently interpreted in the Qur’an as a metaphor for proud and arrogant people who reject God’s signs. Perhaps the Qur’an is interpreting the message of the Gospels as not only speaking about rich people, but of anyone who is arrogant, with an ego bigger than a camel—so big (*kabīr*), indeed, that it is easier for a camel to pass through the eye of the needle than for them to enter the kingdom of heaven.

The Chapter of *al-A’rāf* in the Qur’an frequently condemns “*istikbār*,” and starts by stating that “*istikbār*” is Satan’s major sin. Are the rich generally condemned or are arrogant people generally condemned? There are some exceptions among the rich like Joseph of Arimathea, who is described as rich (*plousios*), but is nonetheless a disciple of Jesus (Matthew 27:57). There are no exceptions, however, among those who are arrogant (*istakbarū*), which is how the Qur’an seems to interpret and translate the message of the rich people (*plousios*) condemned by Jesus in the Gospels. In the example portrayed in this paper, the Qur’an allows us to appreciate the message conveyed by the Gospels by selecting precise polysemous words, while functionally conveying the intended message.

In summary, we may conclude two things. First, it is likely that this passage from the Qur’an is engaging with its counterpart in the Gospels. Other scholars have already come to the same conclusion; however, this paper has identified a number of intertextualities to support the notion. Second, the Qur’an may be engaging with and interpreting Tatian’s Diatessaron, or, alternatively, may simply happen to engage with the rich man asking Jesus and the Parable of the Rich Fool using a similar method to Tatian’s; that is, addressing similar concepts in different parts of the Gospels together, in this case about rich (or arrogant) people.

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# Psali for the 3<sup>rd</sup> Ode

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## Abstract

*This paper edits for the first time one psali preserved in two manuscripts in the collection of the monastery of the Virgin Mary known as al-Surian. The psali tackles the life and miracles of Christ. We will give a full description of the manuscripts, the text and translation, and some comments.*

## Introduction<sup>1</sup>

In a previous study, we edited three psalis,<sup>2</sup> two relating to the life of Christ, and one relating to the miracles of Christ. In this paper, we will publish another psali, which tackles both subjects.

## The Manuscripts

While cataloguing the liturgical manuscripts of, the monastery of the Virgin Mary known as al-Surian,<sup>3</sup> I came across a Coptic text that occurs in two manuscripts.

### A- 429 Liturgy (was number 46)

#### *Psalis<sup>4</sup> for the month of Kihak<sup>5</sup>*

In some texts, the manuscript is two columns, Coptic and Arabic, in others we find the Coptic text followed by the Arabic text, and rarely, there is Coptic text alone.

The handwriting is beautiful, as if the work of a professional scribe. The scribe mentions his name in f. 268a as the monk Šenûdah and the sponsor is mentioned in f. 268.

Dimensions: 30 × 23 cm

<sup>1</sup> This text was discovered during a project to catalogue the Coptic and Arabic manuscripts of the library of Dayr al-Suryan. The project is led by Prof. S. Davis and sponsored by Yale University's Egyptological Endowment. I am grateful to my colleagues Prof. S. Davis and Prof. M. Swanson and I wish to express my gratitude to bishop Mattaus, abbot of the monastery and the librarian fr. Bigoul. Many thanks to the librarians who facilitate our task fr. Azer and fr. Amun.

<sup>2</sup> Youssef 2016, pp. 251–261.

<sup>3</sup> For this monastery, see Evelyn-White 1933, pp. 167–220; Gabra 2002, pp. 47–56; Cody and Grossmann 1991, pp. 876a–881a.

<sup>4</sup> The psalis are hymns recited before the Odes and the Theotokia. The psalis could be sung with the Adam tune or with the Batos tune (Abd-al-Masih, 1958, pp. 85–100).

<sup>5</sup> The month of Kihak is the fourth month of the Coptic Calendar. It is the month before the Nativity. It has special veneration to the Virgin Mary and meditation on the mystery of the Incarnation of the Word. See Viaud 1978, pp. 39–40.



Fig. 1. Ms 429 Liturgy Monastery of the Virgin known as al-Surian.

Area of writing: 23 × 16 cm

23 lines/page

Colophons: ff. 268a

وكان الفراغ من نسخه هذا الكتاب الذي هو كتاب ابصالات شهر كيهك المبارك في سنة 1564 الف وخمسمائة اربعة وستون للشهدا الاطهار السعده الابرار رزقنا الله شفاعتهم امين والمهتم به وصارف عليه من ماله وصلب حاله ايينا الاب البار والانا المكرم المختار والعايد الناسك الزاهد المنتخب المجاهد المحبب في التراتيل في الالحان الداودية الشاجية والتساويح الروحانية الحامل نير الرب منذ الشبوية البكر الطاهر ابنا المبجل الراهب بشاي الملاواني احد رهبان دير الست السيدة بالسريان بيرية شيهة المسيح الالهنا يعوضه عوض الواحد ثلاثون وستون ومائة في ملكوت السموات ويغفر له كل الذنوب والسياسة ويكتب اسمه في سفر الحياة وكامل اخواته القاطنين بالدير وهو قسوس ورهبان ويورثوا الحياة ملكوته الابدية بشفاعت ستنا العدرى وايينا حنس كما امين ومن بعد العمر [الطويل] يكون المذكور اعلاه ولم يملك عليه احد سوا المذكور صاحبه والشكر لله دائما ابديا امين...

The completion of copying of this book which is the book of Psalis for the month of Kihak in the year 1564 of the pure, happy, righteous martyrs (= 1848 AD), May God grant us their intercessions Amen! The sponsor of this and who paid from his money and his own belongings, our father, the right father, the chosen honoured vessel, the ascetic devoted worshipper, the fighter, the lover of the Davidic hymns, the beautiful spiritual, who carried the yoke since his childhood, the pure chaste monk Bišai al-Mallawānī (from Mallawī),<sup>6</sup> one of the monks of the monastery of the Lady, Mistress at al-Surian in the desert of Šihāt. May Christ our God reward him, thirty, sixty and one hundred in the Heavenly kingdom and forgive all his sins and transgressions. May He write his name in the book of life and all his brethren dwelling in the monastery, the priests and monks in order that they inherit the heavenly Kingdom, through the intercessions of our Lady the Virgin and our father John (Hinnis) Kama, Amen.

#### B- 430 (was number 245)

Liturgy (Tuqūs)

*Psalis for the month of Kihak*

No tables of contents.

Colophons: f. 406b

تم وكمل هذا الكتاب المبارك الذي هو كتاب ابصاليات شهر كيهك المبارك بسلام من الرب امين. وكان الفراغ من نسخته في اليوم الخامس والعشرون من الشهر المذكور اعلاه في سنة الف وخمسمائة واربعة وستين للشهدا الاطهار السعده الابرار رزقنا الله شفاعتهم امينز وكان المهتم ومالكه الحقير الذليل المسكين العاجز المهين الكسلان التراب الرماد الذي لا يستحق ان يذكر اسمه بين الناس من اجل كثرت خطايا شنودة بالاسم راهب احد رهبان دير الست السيدة بالسريان من شان التراتيل الروحانية والتعزية الجسدانية وما دام المذكور في قيد الحياة لم احداً يملك عليه غيره بلا مشورته ومن تجاسر واتعدا واخذة وافسد منه شي وغيره كان مدان من قبل الست السيدة ويكون محروم ممنوع مقطوع مربوط بكلمة الله والمخالف حاله تالف وعلى بني الطاعة تحل البركة

<sup>6</sup> Timm 1991, p. 1542.



Finish and completed this blessed book which is the psalis for the month of Kihak in the peace of the Lord, Amen.

The accomplishment of copying took place on the 25th of the above mentioned month in the year 1564 of the pure, happy, just martyrs (= 1847 AD) may God grant us their intercession and the sponsor and the owner is the feeble, humble, poor, the incapable, the lazy, the dust, the ash who is unworthy to mention his name among the people because of his numerous sins, Šinūdah, a monk by name, one of the monks of the monastery of the Lady, Mistress in al-Surian. (This is manuscript is) for the spiritual hymns and the bodily comfort. As the abovementioned is living, no one should possess it without his consultation and who will dare to take it and spoil part of it will be condemned by the Lady, Mistress and will be deposed, excommunicated and bound by the Word of God and the disobedient is in poor condition and may the blessing be upon the sons of obedience.

Endowments (*waqf*-statements): with a different hand and different ink f. 1a);

هذه الابصلمودية اعني كتاب ابصاليات تعلق ايينا ميخايل المنييتيني الرب يعوضة عوض عنها في ملكوت السموات وصارت وقفا مويداً وحيساً مخلداً على دير السيدة بالسريان وكل من تعدا واخرجها من الدير عن الوقفية يكون تحت كلمت الله والذي سيسرط ورقة الوقفية بنوع الخبث لاجل اخذها يكون ايضاً والشكر والسجود للرب دائماً كاتبه القس غبريال الفشنبي.

This psalmodia which is the book of the psalis belongs to our father Michael from Minit<sup>7</sup> may the Lord reward him in the heavenly Kingdom. It became an eternal endowment and bequest forever for the monastery of the Lady in al-Surian, whoever dares to take it out of the endowment of monastery will be under the word of God. Whoever will tear the paper of the endowment with guile in order to take it out will have also the same fate. Thanks and worship be to the Lord forever, the scribe is the priest Gabriel from al-Fašn.<sup>8</sup>

f. 407a

صار هذا الكتاب من يد مالكة الراهب شنودة الى يد ايينا القس ميخايل المنييتيني بشرا ماله وصار المالك عليه ومن بعد حياته يكون وقفا مويداً وحيساً مخلداً على دير الست السيدة بالسريان والشكر لله دائماً

This book came from the hand of his owner the monk Shenūdah to the possession of our father the priest Michael from al-Minitini by buying with money and he became the owner and after his life it will be eternal endowment and bequest forever for the monastery of the Lady Mistress in al-Surian. Thanks be to God forever.

Our text occurs in Manuscript A,<sup>9</sup> ff. 60a–63b Psali Batos for the 3rd Ode

ابصالية واطس على الهوس الثالث في كيهك المبارك	Psali Batos <sup>10</sup> on the third Ode for the blessed Kihak	
αΙΕΡΖΕΛΠΙΣ ΕΠΕΚΟΥΧΑΙ: Φ† ΝΤΕ ΤΑΣΩΤΗΡΙΑ: ΜΠΕΡΟΥΑΙ ΣΑΒΟΛ ΜΜΟΙ: ΜΑΖΘΗΚ ΕΤΑΒΟΗΘΙΑ	توكلت على خلاصك ياله خلاصي فلا تبعدني التفت الى معونتي	I hoped for Your salvation, God of my <i>deliverance</i> , do not be away, and listen to my <i>help</i> .

<sup>7</sup> There are two places bearing the same name, one near Cairo and another near Šibin al-Kūm. See Ramzi 1994, part 2, vol. 1, p. 14 and part 2, vol. 2, p. 194.

<sup>8</sup> Timm 1984, pp. 946–947.

<sup>9</sup> The two manuscripts are identical; we rely on manuscript A for page division only.

<sup>10</sup> Coptic chanting term, one of the two leading melody types in the music of the Coptic church. This melody type (*lahm Batus*) receives its name from the opening words of the Thursday Theotokia, which begins, “*Pibatos* . . .” (“The bush that Moses saw in the desert”). See Ishaq 1991, 2320b–2321a.



ΒΩΝ ἸΝΙΒΑΛ ἸΤΕ ΠΑΚΑΤῚ ΘΡΙΕΜΙ ΕΠΕΚΝΟΜΟΣῚ ΝΑΖΜΕΤ ΕΒΟΛΖΑ ΟΥΖΟΤῚ ΝΕΜ ΠΖΟΧΖΕΧ ἸΠΙΚΟΣΜΟΣ	افتح اعين فهمي لكي اعلم ناموسك نجيني من خوف وضيقه العالم	Open the eyes of my mind in order that I teach Your <i>Law</i> . <sup>11</sup> Deliver me from the fear and the distress of this <i>World</i> .
ΓΕ ΓΑΡ ἸΘΟΚ ΠΕ ΠΑΜΑΝΦΩΤῚ ΠΑΒΟΗΘΟΣ ἩΕΝ ΝΑΘΛΥΨΙΣῚ ΤῖΝΙ ΝΑΚ ἸΠΙΨΕΠΖΜΟΤῚ ΡΗΤΟΣ ΝΕΜ ΕΠΙΚΛΗΣΙΣ	لأنك انت هو ملجاي معيني في شدايدي لكي اقدم لك الشكر جهراً وسراً	For You are my Refuge, my <i>Helper</i> in my <i>affliction</i> , I offer You, thanksgiving <i>famously</i> and by <i>invocation</i> . <sup>12</sup>
ΔΥΜΙΟΥΡΓΟΣ ἸΤΚΤΗΣΙΣ Ὶ ΠΕ ΠΕΝΘΕ ἸΗΣ ΠΧΣῚ ΤῖΝΑΖΤ* ΕΡΟQ ΔΘΝΕ ΣΑΝΙΣῚ ΠΙΝΟΥΤ ἸΑΛΗΘΙΝΟΣ	خالق البرية هو ربنا يسوع المسيح* او من يعبر شك الاله الحقيقي	The <i>Creator</i> of the <i>Creation</i> is our Lord Jesus <i>Christ</i> . I believe in Him without doubt, the <i>true</i> God.
ΕΦΟΥΩΝΖ ΕΒΟΛἩΕΝ ΠΙΚΟΣΜΟΣῚ ἩΕΝ ΠΙΣΩΜΑ ΕΘΒΕ ΑΔΑΜῚ ΑQἹΡΙ ἸΖΑΝΘΑΥΜΑΣΤΟΣῚ ΝΕΜ ΖΑΝΨΦΗΡΙ ΝΕΜ ΖΑΝΧΟΜ	ظهر في العالم بالجسد من اجل ادم صنع معجزات وعجائب وقوات	He appeared in the <i>World</i> in <i>flesh</i> for Adam. He made <i>wondrous</i> (things), miracles and powers.
Ὶ ἸΖΥΔΡΙΑ ἸΜΩΟΥῚ ΑQΑΙΤΟΥ ἸΗΡΠ ΕΥΣΩ ἸΜΟQῚ ΑQΟΥΩΝΖ ΕΒΟΛ ἸΠΕQΩΟΥῚ ΝΕQCΠΗΟΥ ΑΥΝΑΖΤ ΕΡΟQ	سنة اجاجين اجعلهم خمر يشرب منه اظهر مجده وامنوا به اخوته	Six <i>water pots</i> <sup>13</sup> he made them drinkable wine. He revealed His glory to His brethren. They believed in Him.
ΖΕΟΥ ἸΧΕ ΝΕQΨΦΗΡΙῚ ΝΗΕΤΑQἹΡΙ ἸΜΩΟΥῚ ΤῖΝΑΖΤ ΕΤΕQΜΕΤΧΩΡΙῚ ΧΕ ἸΘΟQ ΠΕ ΠΟΥΡΟ ἸΤΕ ΠΩΟΥ	كثيرة عجايبه الذي صنعهم ومن بقوته لانه هو ملك المجد	Numerous are your miracles, that You did. I believe His might for You are the king of Glory.
ΗΠΠΕ ΑQCΑΧΙ ΝΕΜ ΠΙΒΩΚῚ ἸΤΕ ΠΟΥΡΟ ΕQΧΩ ἸΜΟΣῚ ΧΕ ΝΑΖΤ ΟΥΟΖ ΜΑΨΕΝΑΚῚ ΕQΕΩΝἩ ἸΧΕ ΠΕΚΧΡC ΑΛΩΟΥ <sup>14</sup>	هوذا تكلم مع عبد الملك قايلاً امن وامضي فيحيا فناك	Behold, He talked with the servant of the king saying: Believe and go, your <i>good</i> child will live. <sup>15</sup>
ΘΨΕΡΙ ἸΤΕ ΠΙΑΡΧΩΝῚ ΕΤΕ ΠΕQΡΑΝ ΠΕ ΙΑΙΡΟΣῚ ΑQΤΑΝἩΟ ἸΜΟΣ* ἩΕΝ ΠΕQΖΟΝῚ ΕΤΑQΑΜΟΝΙ ἸΜΟΣ	ابنة الارخن الذي اسمه يايرس احياها بامر* لما مسكها	The daughter of the <i>notable</i> whose name is Jairus, He made her to live with His order when He hold her. <sup>16</sup>

<sup>11</sup> Ps 118[119]:18.<sup>12</sup> Arabic “openly and discreetly”.<sup>13</sup> Jn 2:6–11.<sup>14</sup> Read ἸΑΛΟΥ.<sup>15</sup> Allusion to Mt 8:8–13.<sup>16</sup> Lk 8:41.

<p>ΙC ΝΙΚΑΚΣΕΖΤ ΑΥΤΟΥΒΟΨ ΉΕΝ ΠΧΙΝΘΡΕΦΙ ΝΕΜΩΟΥΨ ΑΥΟΥΩΨΤ ΜΠΕΡΜΘΟΨ ΕΥΙΩΡΕΜ ΕΒΟΛΉΕΝ ΠΕΦΩΟΥ</p>	<p>ها البرص طهروا عندما لمسهم سجدوا امامه داهشين من مجده</p>	<p>Lo, the lepers were purified when He touched them. They worshipped in front of Him amazed by His glory.<sup>17</sup></p>
<p>ΚΟΥΡ ΜΒΕΛΛΕ ΕΡΦΑΪΡΙ ΕΡΩΟΥΨ ΑΦΘΕΡΕ ΠΙΔΕΜΩΝ ΑΦΨΟΥΙΤΨ ΖΑΝΟΥΟΝ ΝΑΨΩΨ ΕΒΟΛ ΧΕ ΦΑΙ ΠΕ ΠΩΗΡΙ ΝΔΑΔ</p>	<p>اخرس واعما ابراهم وجعل الشيطان فازعا وقاما صارخين ان هذا هو ابن داوود</p>	<p>Dumb and blind (He) healed them,<sup>18</sup> He made the <i>demons</i> vain. Some (people) were crying saying: "This is the son of David."</p>
<p>ΛΟΙΠΟΝ ΑΥΪΝΙ ΝΑΨ Ψ ΝΖΑΝΒΕΛΛΕΨ ΝΕΜ ΖΑΝΒΑΛΕΨ ΠΙΟΥΔΙ ΑΨΤΑΛΒΟ ΜΜΟΨ ΝΕΜ ΖΑΝΕΒΟ ΝΕΜ ΖΑΝΧΑΒΕΨ</p>	<p>وايضا قدموا له عميان ومقعدين فشفا واحد واحداً مع خرسا وعسم</p>	<p>And also they brought to Him blind and lame with dumb and maimed persons He healed one.<sup>19</sup></p>
<p>ΜΠΕΡΕΡΖΟΥΨ ΓΑΡ ΠΕΧΑΨ ΕΤΑΨΜΩΨΙ ΖΙΧΕΝ ΦΙΟΜΨ ΝΙΜΑΘΗΤΗΣ ΕΤΑΨΝΑΨ ΕΡΟΨ ΑΨΩΨ ΕΒΟΛ ΉΕΝ ΟΥΝΙΨΤΨ ΝΧΟΜ</p>	<p>لا تخافوا قال لماشي على البحر والتلاميذ لما راوه صرخوا بقوة عظيمة</p>	<p>Do not fear, He said, when He walked on the sea. When the disciples saw Him, they cried out extremely:<sup>20</sup></p>
<p>ΝΘΟΨ ΑΨΣΕΧΙ<sup>21</sup> ΝΕΜΩΟΥΨ ΜΠΕΡΕΡΖΟΥΨ ΧΕ ΑΝΟΚ* ΠΕ ΣΑΤΟΥΨ ΑΨΖΕΡΙ ΝΧΕ ΝΙΜΩΟΥΨ ΟΥΟΖ ΝΙΘΟΥΨ ΑΨΕΡΧΑΜΗ</p>	<p>اما هو فتكلم معهم لا تخافوا * اني انا هو وللفت سكنت المياة والرياح هدوا</p>	<p>He spoke to them: "Do not be afraid, it is Me." And immediately the water ceased and the winds became calm.</p>
<p>ΞΩΟΥΝ ΜΠΑΘΕΒΙΟΨ ΠΕΧΕ ΨΧΑΝΑΝΕΟΨ ΤΑΨΕΡΙ ΤΖΕΜΚΗΟΥΨ ΕΜΑΨΩΨ ΠΑΣΨΨΕΝΖΗΤ ΉΑΡΟC</p>	<p>تعرف تواضعي قالت الكنعانية ابنتي معذبه هذا يا مخلص تحنن عليها</p>	<p>You know my humility, Canaanite said<sup>22</sup> my daughter is very afflicted, My <i>Saviour</i> have pity upon her.</p>
<p>ΟΥΝΙΨΤΨ ΠΕ ΠΕΚΝΑΖΨ ΝΧΩΡΙΨ ΠΕΟΥΨΩΨ ΨΩΠΙ ΜΠΑΙΝΑΨ ΑΨΟΥΧΑΙ ΝΧΕ ΤΕCΨΕΡΙΨ ΉΕΝ ΨΟΥΝΟΥΨ ΕΤΕΜΜΑΨ</p>	<p>عظيمة هي قوت ايمانك ارادتك تكون هذا الفت فعوفيت ابنتها من تلك الساعة</p>	<p>Great is your powerful faith, I did see (such) let your wish be. In that hour, her daughter is healed.<sup>23</sup></p>
<p>ΠΙ Ξ ΝΩΙΚ ΑΨCΜΟΥΨ ΕΡΩΟΥΨ Δ ΝΨΟ ΝΨΩΜΙ ΑΨΤCΙΟΨ Ξ ΜΒΙΡ ΑΨΜΟΖ ΜΜΩΟΥΨ ΉΕΝ ΝΙΕΤΑΨΕΡΖΟΥΨ</p>	<p>السبع خيرات باركهم اشبع اربعة الف رجل سبع قفاف ملوهم من الذي فضلوه</p>	<p>Seven loaves, He blessed them, four thousand men He satiated them. Seven full baskets that were left.<sup>24</sup></p>

<sup>17</sup> Mt 8:2 (only one leper) and Lk 17:12 (without touching).

<sup>18</sup> Mt 12:22, 15:30.

<sup>19</sup> Mt 21:14.

<sup>20</sup> Mt 14:25.

<sup>21</sup> Read ΑΨCΑΧΙ.

<sup>22</sup> Mt 15:22.

<sup>23</sup> Mt 15:28.

<sup>24</sup> Mt 15: 34, Mk 8:5.

ΡΩΜΙ ΜΒΕΛΛΕ ΉΕΝ ΙΕΡΙΧΩΨ ΕΠΕΦΡΑΝ ΠΕ ΒΕΡΔΙΜΙΟΣΨ ΕΦΩΨ ΕΒΟΛ ΜΠΕΦΜΘΟΨ ΜΠΑΙΡΗΤ ΕΦΧΩ ΜΜΟΣ	رجل اعما في اريحا اسمه طيمما صرخ امامه هكذا قايلاً	A blind man in Jericho, whose name is Bartimaeus proclaiming in front of Him thus saying: <sup>25</sup>
ΣΩΤΕΜ ΕΡΟΙ ΧΕ ΤΑΤΧΩΛ <sup>26*</sup> ΠΕΚΡΑΝ ΑΙΝΑΖΤ ΕΡΟΦΨ ΑΦΧΑ ΤΕΦΧΙΧ ΕΧΕΝ ΝΕΦΒΑΛΨ ΑΦΝΑΥ ΜΒΟΛ ΕΦΜΩΨΙ ΝΣΩΦ	اسمعني اني * لا اجحد اسمك امنت به فوضع يديه على عينيه فابصر وتبعه	Hear me and I will not deny Your name. I believe in Him. He (Jesus) put His hands on His eyes. He (Bartimaeus) saw and followed Him (Jesus).
ΤΦΑΨΙ ΝΝΑΖΙΠΑΡΧΟΝΤΑΨ ΠΕΧΕ ΖΑΚΧΕΟΣ ΜΠΕΝΘΣΨ ΤΝΑΤΗΙΦ Ω ΔΕΣΠΟΤΑΨ ΝΝΙΖΗΚΙ ΉΕΝ ΟΥΨΡΩΙΣ	نصف اموالي قال زكا لرنا انا اعطيه يا سيدي للمساكين يتحفظ	"Half of my <i>wealth</i> , said Zacchaeus, to our Lord, I will give it, <i>O Lord</i> with zeal." <sup>27</sup>
ΥΣ ΠΙΟΥΧΑΙ ΑΦΨΩΠΙ ΝΑΚΨ ΠΕΧΕ ΠΘΣ ΦΤ ΝΤΕ ΝΙΧΟΜΨ ΜΦΟΟΥ ΓΑΡ ΝΘΟΚ ΖΩΚΨ ΟΥΨΗΡΙ ΝΤΕ ΑΒΡΑΑΜ	هوذا الخلاص صار لك قال الرب اله القوات اليوم لأنك انت ايضا ابن ابراهيم	Behold, salvation happens today to you, said God of the might, For he also is a son of Abraham. <sup>28</sup>
ΦΗΕΤΖΕΜΣΙ ΖΙΧΕΝ ΝΙΧΕΡΟΥΒΙΜΨ ΕΦΤΑΛΗΟΥΤ ΕΟΥΕΩΨ ΕΦΨΕ ΕΨΟΥΝ ΕΙΛΗΜΨ Ω <sup>29</sup> ΠΕ ΠΑΙΝΙΨΤ ΝΘΕΒΙΟ	الجالس على الشارويم ركب على حماره داخلا يروشليم يالهذا الاتضاع العظيم	He who is sitting above the Cherubim rode a colt, entered to Jerusalem, o what great humility. <sup>30</sup>
ΧΟΥΑΒ ΠΘΣ ΟΥΟΖ ΚΣΜΑΡΨΟΥΤΨ ΑΚΒΙ ΜΚΑΖ ΟΥΟΖ ΜΠΕΚΧΩΝΤΨ ΕΒΟΛΨΕΝ ΝΗΕΘΜΨΟΥΤΨ* ΉΕΝ ΠΙΕΖΟΥΨ ΜΜΑΖ Γ	قدوس يارب ومبارك تالمت ولم تغضب قمت من الاموات في * اليوم الثالث	Holy is the Lord, and blessed are You. He suffered and He did not anger from the death. He (rose) <sup>31</sup> on the third day.
ΨΥΧΗ ΝΙΒΕΝ ΕΤΨΕΝ ΑΜΕΝΤΨ ΑΚΕΝΟΥ ΕΨΩΠΙ ΝΕΜΑΚΨ ΤΗΣ ΠΧΣ ΠΨΗΡΙ ΜΦΤΨ ΤΕΝΟΥΨΨΤ ΜΜΟΚ ΤΕΝΤΨΨΟΥ ΝΑΚ	كل الانفس الذي في الجحيم اصعدتهم معك يا يسوع المسيح ابن الله نسجد لك ونمجد لك.	All <i>souls</i> in Hades, <sup>32</sup> You took them with You, Jesus <i>Christ</i> the Son of God. We worship You, we glorify.
ΩΟΥ ΝΙΒΕΝ ΝΕΜ ΤΑΙΟ ΝΙΒΕΝΨ ΕΡΠΡΕΠΙ ΕΤΕΚΑΝΑΣΤΑCΙCΨ ΤΕΝΤΨΩΒΖ ΜΜΟΚ ΝΣΗΟΥ ΝΙΒΕΝΨ ΨΟΠ ΝΤΕΝΠΡΟCΚΥΝΗCΙC	كل مجد وكل كرامة يليق بقيامتك نطلب اليك كل حين اقبل سجودنا	All glory and all honour are <i>worthy</i> to Your <i>resurrection</i> , we beseech You all time receive our <i>adoration</i> .

<sup>25</sup> Mk 10:46, Lk 18:35.<sup>26</sup> Coptic incorrect.<sup>27</sup> Lk 19:8.<sup>28</sup> Lk 19:9.<sup>29</sup> Read ΟΥ.<sup>30</sup> Mt 21:2, Mk 11:2, Lk 19:30, Jn 12:15.<sup>31</sup> Only in Arabic.<sup>32</sup> 1 Pt 3:18-19.

<p>             ወዕንገላቲዮ ስጋ፡፡፡ ጸጽ              ለእንገላቲዮ ጽጋ፡፡፡ ጸጽ              ጽጋ፡፡፡ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             طوبأ للرسل آمنوا بقيامتك              ومنهم أعضاء راوك شكوا           </p>	<p>             Blessed are the <i>Apostles</i>, for they              believed in Your <i>Resurrection</i> and              among them some <i>members</i> saw You              without doubt.           </p>
<p>             ወላጅ፡፡፡ ስጋ፡፡፡ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             أعطيت كل سلطان في              السما وعلى الأرض معا              آمنوا بي بحقيقة يا تلاميذي              القديسين           </p>	<p>             All authority is given to Me, in              heaven and earth together; believe in              Me truly O My holy <i>disciple</i>.           </p>
<p>             ቃጸ፡፡፡ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             امضوا الى العالم وعلموهم*              ان يحفظوا ناموسي والذين              يؤمنوا عمدهم           </p>	<p>             Go to the <i>world</i> teach them in order              they keep the <i>Law</i>. Those who              believe, baptise them.<sup>34</sup> </p>
<p>             ስጋ፡፡፡ ስጋ፡፡፡ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             باسم الاب والابن والروح              القدس والايات              والاعاجيب يتبعونكم معا           </p>	<p>             In the name of the Father, the Son and              the Holy <i>Spirit</i><sup>35</sup> marvels and miracles              together will follow you.           </p>
<p>             ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             اخرجوا الشياطين اشفوا              المرضى والذين في القبور              اقيمهم.           </p>	<p>             Cast out the <i>devils</i>, heal the sick,<sup>36</sup>              those who are in the <i>tombs</i> raise them.           </p>
<p>             ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             سلامي انا وسلام ابي              يكون معكم الى الابد يا              تلاميذي الامنا           </p>	<p>             My own <i>peace</i>, the <i>peace</i> of My              Father be with you forever, O              entrusted <i>disciples</i>.<sup>37</sup> </p>
<p>             ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             اطرده يارب عني الافكار              الخبيثة اذكرني برحمتك انا              عبدك ابن سيمون           </p>	<p>             Chase from me, O Lord, the <i>evil</i>              thoughts. Remember me, in Your              mercy, Your slave the son of Simon.           </p>
<p>             ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             اعطيني رحمة* قدامك              لاجد دالة لكي استحق              ملكوتك لان لك المجد              اليلويا           </p>	<p>             Give mercy to me in front of You in              order to find <i>liberty of speech</i> so that I              become worthy in Your kingdom,              Glory be to You. Alleluia.           </p>
<p>             ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ              ጸጽ ጸጽ ጸጽ ጸጽ ጸጽ           </p>	<p>             اذا ما رتلنا           </p>	<p>             And if we ...           </p>

<sup>33</sup> Read **ጸጽ**.

<sup>34</sup> Mk 16:15.

<sup>35</sup> Mt 28:19.

<sup>36</sup> Mt 10:8.

<sup>37</sup> Jn 14:27, 20:21.

### Commentary

The author of this text is named in the penultimate stanza, while most authors mention their names in the last stanza, such as Sarkis,<sup>38</sup> Nicodemus,<sup>39</sup> Hermina, Christodolus,<sup>40</sup> and John of Assiut.<sup>41</sup>

However, there is another example, in the Psali for the Lectionary, which is written by a priest called Joseph (Yûsif).<sup>42</sup>

The author also used previous liturgical texts. We will give two examples here:

First example:

Psali of the 3 <sup>rd</sup> Ode	Response of the Matins' Gospel <sup>43</sup>
τφᾱψι ἡναζιπαρχονταῶ πεχε ζακχεος ἡπενδῶς ἡναθηῖω δεσποταῶ ἡνιζηκι ἡεν οὐρωῖς	τφᾱψι ἡναζιπαρχονταῶ πεχε ζακχεος ἡπεδῶς ἡναθηῖω δεσποταῶ ἡνιζηκι ἡεν οὐρωῖς
γς πιοῦχαι ἀρωπι νὰκῶ πεχε πῶς φῡ ἡτε νιχομῶ ἡφοοῦ γὰρ ἡθοκ ζωκῶ οὐωηρι ἡτε ἀβραὰμ	ις πιοῦχαι ἀρωπι νὰκῶ πεχε πῶς φῡ ἡτε νιχομῶ ἡφοοῦ γὰρ ἡθοκ ζωκῶ οὐωηρι ἡτε ἀβραὰμ
So Zaccheus said to His <i>Lord</i> , "O Master, half of my <i>belongings</i> I will give to the poor with zeal."	Zaccheus said to His <i>Lord</i> , "O Master, half of my <i>belongings</i> I will give to the poor with zeal."
Behold, the Lord God of Powers said: "Today, salvation happened to you, because you are also a son of Abraham."	Behold, the Lord God of Powers said: "Today, salvation happened to you, because you are also a son of Abraham."

Second example:

Psali of the 3 <sup>rd</sup> Ode	Chant of the Palm Sunday before the Trisagion <sup>44</sup>
φῡετρεμσι ζιχεν νιχεροῦβιμῶ εἰταλνοῦτ εοῦωοῦῶ εἰωε εἰοῦν εἰλημῶ ω πε παῖνιωῡ ἡεβιο	φῡετρεμσι ζιχεν νιχεροῦβιμῶ εἰταλνοῦτ εοῦωοῦῶ εἰωε εἰοῦν εἰλημῶ ω πε παῖνιωῡ ἡεβιο
He who is sitting above the Cherubim, rode a colt, and entered Jerusalem, O What great humility.	He who is sitting above the Cherubim, rode a colt, and entered Jerusalem, O What great humility.

### Conclusion

The text presented here provides us with a new type of Psalis, combining the life of Jesus with his miracles and supplications to God. The author used some liturgical texts from other rites. The Coptic vocabulary is good, as the author used the biblical text; however, in order to follow alphabetical order, he did not respect the rules of grammar.

<sup>38</sup> Youssef 1998, pp. 383–402.

<sup>39</sup> Youssef 1994, pp. 625–633.

<sup>40</sup> Youssef 2006, pp. 381–397.

<sup>41</sup> Youssef 2003, pp. 311–319; 2008, pp. 183–200.

<sup>42</sup> Burmester 1930, pp. 373–385.

<sup>43</sup> Atallah Arsenius al-Muharraqi 1970, p. 100.

<sup>44</sup> Atallah Arsenius al-Muharraqi 1970, p. 101.

The placement of the name of the author is unusual (in the penultimate stanza) and, furthermore, he did not mention his first name but only Son of Simon.

This article shows once more the importance of publishing liturgical texts, even if they are from a late date.

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# Senile or Full of Beans?

## A Far Eastern Perspective on מְלֵא יָמִים Jer 6:11

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### Abstract

*מְלֵא יָמִים, a phrase that occurs only in Jer 6:11 in Classical Hebrew, has been much discussed. Its literal rendering, 'full of days,' is said by many authorities to refer to very old age. Taking the literary structure of the verse more carefully, it is argued here, its literal rendering makes better sense when understood in the sense of 'very young.' In this connection, a Chinese-Japanese idiom, 'full of springs and autumns' when translated verbatim, is mentioned.*

The construct phrase מְלֵא יָמִים in Jer 6:11 has been much discussed. The verse reads:

וְאֵת חֲמַת יְהוָה מְלֵא תִי בְלֵאִיתִי הַכִּיל שְׁפָף עַל-עוֹלָל בַּחוּץ וְעַל סוּד בַּחוּרִים יַחְדָּו כִּי-גַם-אִישׁ עִם-אִשָּׁה  
יִלְכְּדוּ וְקָן עִם-מְלֵא יָמִים

Some take the phrase in the sense of *very old*.<sup>1</sup> In his commentary Rashi specified: “it exceeds זָקֵן.” For Fischer זָקֵן denotes “generell im Leben vorgerückte Menschen,” and מְלֵא יָמִים “noch eigens Sterbenden.”<sup>2</sup> This particular collocation is a hapax, but a verb form מְלֵא יָמִים does occur: אֶת-מִסְפַּר יָמֶיךָ אֲמַלֵּא Exod 23:26, cited by Isaiah di Trani, an early mediaeval Jewish commentator, and זָקֵן אֲשֶׁר לֹא-יִמְלֵא אֶת-יָמָיו Isa 65:20, cited by Menachem ben Shimeon, a slightly earlier commentator, also of Jewish background. So interpreted, our Hebrew phrase would denote someone who dies in good old age and whose time on the earth is up.<sup>3</sup> Targum Jonathan’s יוֹמֵיָן דְּסִבֵּעַ points in the same direction, and Fischer thought that the prophet may have had in his mind a standing expression as found in זָקֵן וְשָׁבַע יָמִים Gen 35:29. The important thing here is that זָקֵן and שָׁבַע יָמִים are synonymous and linked with a Waw. Fischer was aware that there must be a contrast between the two. Just as the preceding pair אִישׁ עִם אִשָּׁה, the last pair also links the two constituents with עִם, and a man and a wife are contrasted with each other. Rudolph, who edited our book for BHS, probably wanted to resolve this difficulty by proposing his emendation, לֹא מְלֵא יָמִים, invoking haplography.<sup>4</sup> McKane rejects this emendation on the ground that “the point is missed by introducing a contrast of young and old.”<sup>5</sup> He goes on: “What is intended is rather natural groupings—

<sup>1</sup> So, for example, Rashi – “close to death”; “extremely old (זָקֵן מוֹפְלֵג),” Hoffman 2001, p. 226; “the old folk and the very aged,” Carroll 1986, p. 194; “stokoud,” Oosterhoff 1990, p. 226.

<sup>2</sup> Fischer 2005, p. 269.

<sup>3</sup> So “those who have reached the furthest limit of old age,” Keil 1988, p. 140.

<sup>4</sup> In his commentary he does not proffer an argument for this proposed emendation: Rudolph 1968, p. 44.

<sup>5</sup> McKane 1986, p. 146.

children playing in the streets, young men in company, a husband and wife at home and a ‘club’ of old men.”<sup>6</sup> We would point out two details: 1) עוֹלָל and בְּחֹרִים are linked with a Waw, not with עַם, and 2) there is no simple progression in the verse, but there is a break in the middle, marked with כִּי, so that the sequence is A and B, C with D, and E with F. There is also נָם to be noted. We do not think it denotes “not only A and B, but also C, D, E, and F,” but rather “one might wish that D and F are spared this horrifying requital, but No, D is going to be felled along with C, and F along with E.” We submit that the contrast between E and F can be expressed not by emending the MT, but by translating מְלֵא יָמִים literally as Vulgate<sup>7</sup> and LXX<sup>8</sup> do respectively with *senex cum pleno dierum* and πρεσβύτερος μετὰ πλήρους ἡμερῶν ‘an old person together with a person full of days’.<sup>9</sup> Classical Japanese has inherited from Archaic Chinese a short idiomatic phrase, written with three characters, which would literally translate as ‘full of springs and autumns’.<sup>10</sup> It appears in a description of a very young emperor who can still expect to welcome many springs and autumns. Taking the history of interpretation of our Hebrew phrase into account, we believe that מְלֵא יָמִים can be so interpreted.<sup>11</sup> In the light of what we have said above about the structure of Jer 6:11 the mention of youth at the end of the verse is no repetition of הַבְּחֹרִים.

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<sup>6</sup> His translation “an old man with his contemporaries” is too paraphrastic.

<sup>7</sup> Jerome, in his commentary on the book, does not deal with this issue. John Calvin may not have been a leading Hebraist in his days, but his translation is close to Vulgate, *senex cum pleno aetatis*. Interestingly he understands יָקֵן as meaning “senem, qui jam propinquus est morti,” what Rashi thinks our construct phrase means, and *plenum aetatis* could be younger: “omnes qui jam sunt maturi: quemadmodum ab anno 50 usque ad 80 possunt vocari pleni dierum,” Gueunier 2016, p. 249.

<sup>8</sup> As far as one can see from Allenbach (1975-2000), none of the early Greek commentators on Jeremiah deals with this verse.

<sup>9</sup> Not “an older person with fulness of days” as in Pietersma and Wright 2007, p. 887, nor “ein Älterer, mit einer Fülle an Tagen” as in Kraus and Karrer 2009, p. 1296, where “Ältere mit Hochbetagten” is offered as an alternative. πρεσβύτερος, though comparative in form, often means just ‘old, elderly,’ and μετὰ is not used in the manner of *with* as in ‘a child with unlimited stamina.’ In view of πρεσβύτερος, masculine, πλήρους must likewise be masculine, not neuter singular meaning ‘fulness.’ Though יָקֵן, usually in the plural, is often applied to a dignitary in a community, someone invested with authority, in the Septuagint the adjective πρεσβύτερος means ‘elderly, older,’ but not ‘elder (of a congregation)’; it is about advanced age, not advancement in social status.

<sup>10</sup> The phrase appears for the first time in a historical book called *Shiji*, written by Sima Qian around 90 BC. For this information I am indebted to Mrs Dr Ying Zhang of East China Normal University in Shanghai.

<sup>11</sup> McKane (1986, p. 146) refers to the Peshitta translation: ‘am ṭlē yāwmāṭā ‘with a person of tender age,’ indicative of a Near Eastern perspective. The same Syriac phrase is used at Isa 65:20 to render עוֹלָל. Pace McKane this Peshitta text does not have to render support to an emendation proposed by Rudolph to insert לָא and read מְלֵא (haplography), but the Syriac translator understood the MT as a Chinese-Japanese reader might, and translated it “dynamically,” not “mechanically” or *verbatim*. This Syriac phrase is used by Aphrahat in his *Demonstrationes*, ed. W. Wright, 424.18, 426.12, where Aphrahat is not quoting Jer 6:11 nor alluding to it. ṭlē is a common substantive in the construct state of ṭalyā ‘child,’ related to Heb. טֶלֶא ‘lamb.’

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# The Origin of Stepped Rock-Cut Tunnels in Eastern Anatolia

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## Abstract

*Stepped rock-cut tunnels are among the most interesting remains at many fortresses in Eastern Anatolia. The construction of these tunnels, which are cut deep into rock surfaces up to a length of 350 m, must have been at least as difficult as that of the fortification walls and expertise would have been required.*

*Stepped rock-cut tunnels and associated fortresses in Eastern Anatolia have not so far been evaluated as a whole. The stepped rock tunnels in Eastern Anatolia have been accepted as one of the basic criteria indicating the Urartian period since the beginning of the 20th century.*

*In this study, we first consider the types of stepped rock-cut tunnels in Eastern Anatolia, the purposes of their construction, and their distribution. We then discuss their dating and our interpretation of the period of their arrival in the region of Eastern Anatolia.*

**Keywords:** Rock-cut stepped tunnel; Eastern Anatolia; Urartian Kingdom; Hellenistic-Roman Period.

## Introduction

Stepped rock-cut tunnels are among the most interesting remains at many fortresses in Eastern Anatolia. The construction of these tunnels, which are cut deep into rock surfaces up to a length of 350 m, must have been at least as difficult as that of the fortification walls and would have required expertise. Taking into consideration also the labour spent on their construction, these tunnels can be said to have had important functions.

Rock-cut tunnels are found not only in Eastern Anatolia, but also in many other regions of Anatolia (Figs 1–2). Stepped rock-cut tunnels in general have attracted the interest of travellers and researchers since the middle of the 19th century.<sup>1</sup>

Lehmann-Haupt was the first to write that the stepped tunnels were a characteristic of *Chaldian* (Urartu) fortresses.<sup>2</sup> This interpretation seems to have influenced Burney, who did research on Urartu fortresses and drew their plans about 50 years later. Burney did not doubt that the stepped tunnels at Tunceli/Bağın Fortress and Van/Toprakkale were associated with the Kingdom of Urartu. Bağın and the stepped tunnels are described as follows in his report, which has been a source for many subsequent studies on Urartu:

<sup>1</sup> Taylor 1868, pp. 282–285, 295; Perrot *et al.* 1872, p. 373; Lehmann-Haupt 1910, p. 103; Leonhard 1915, pp. 236–238; Osten 1929, pp. 123–136.

<sup>2</sup> Lehmann-Haupt 1910, p. 103.

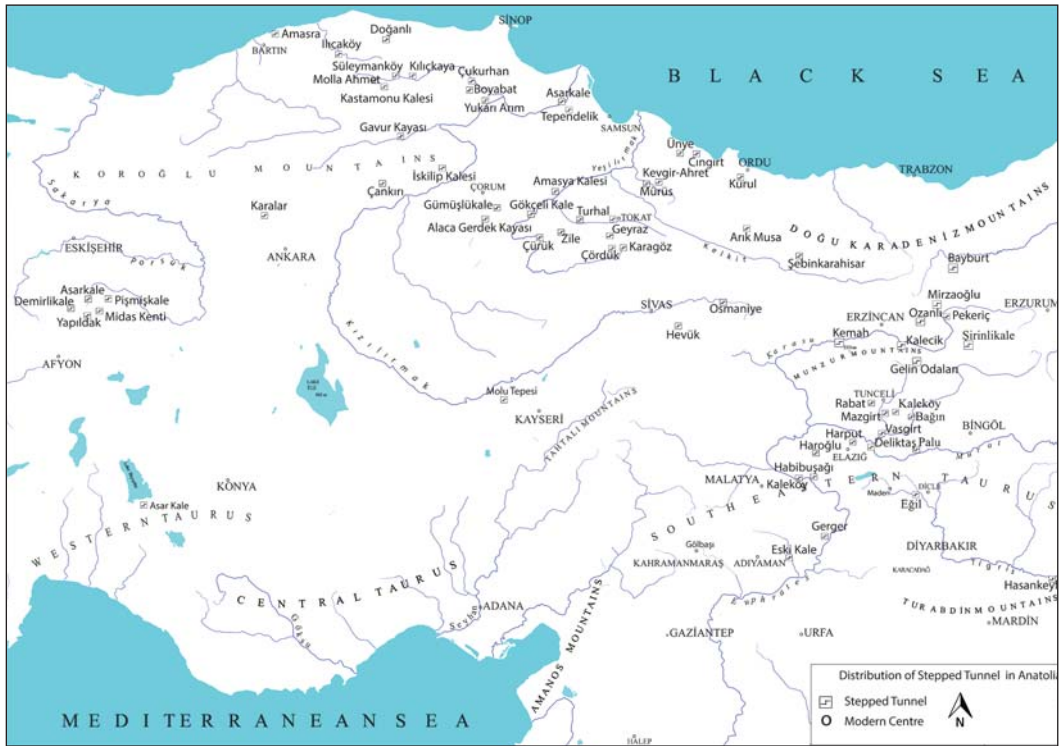


Fig. 1. The distribution of stepped rock-cut tunnels in Anatolia.

It stands on an impregnable rock, round whose foot flows the swift Peri Su. On the north and west sides the medieval walls are built directly on the remains of the Urartian, which stand three or four courses high. Nowhere is the contrast between the large, unmortared Urartian ashlar and the medieval masonry of small stones set in mortar more easily seen. A cuneiform inscription confirms the Urartian date of the original defences. Circular pits cut down into the rock, inside the castle, may have served as cisterns. Certainly the purpose of the spiral staircase, cut up from the river in a tunnel through the rock and continued in perilous steps up the cliff-face, was probably to enable the garrison to collect water from a place which the enemy could reach only with difficulty. Comparison with Toprakkale suggests that this staircase belongs to the original Urartian defences.<sup>3</sup>

Careful inspection of cut-stone/ashlar courses at Bağın (Fig. 3), which Burney considered to be from the Urartian period, shows that they were mortared; therefore, they must have been later than the Urartian period. The Urartian cuneiform inscription on the upper part of the wall is not *in situ*, but has been brought from elsewhere and reused for the construction of the wall. Today, part of this inscription is on the wall, and the other part of it is in Elazığ Museum.<sup>4</sup>

<sup>3</sup> Burney 1957, p. 52.

<sup>4</sup> Schäfer 1973–1974.



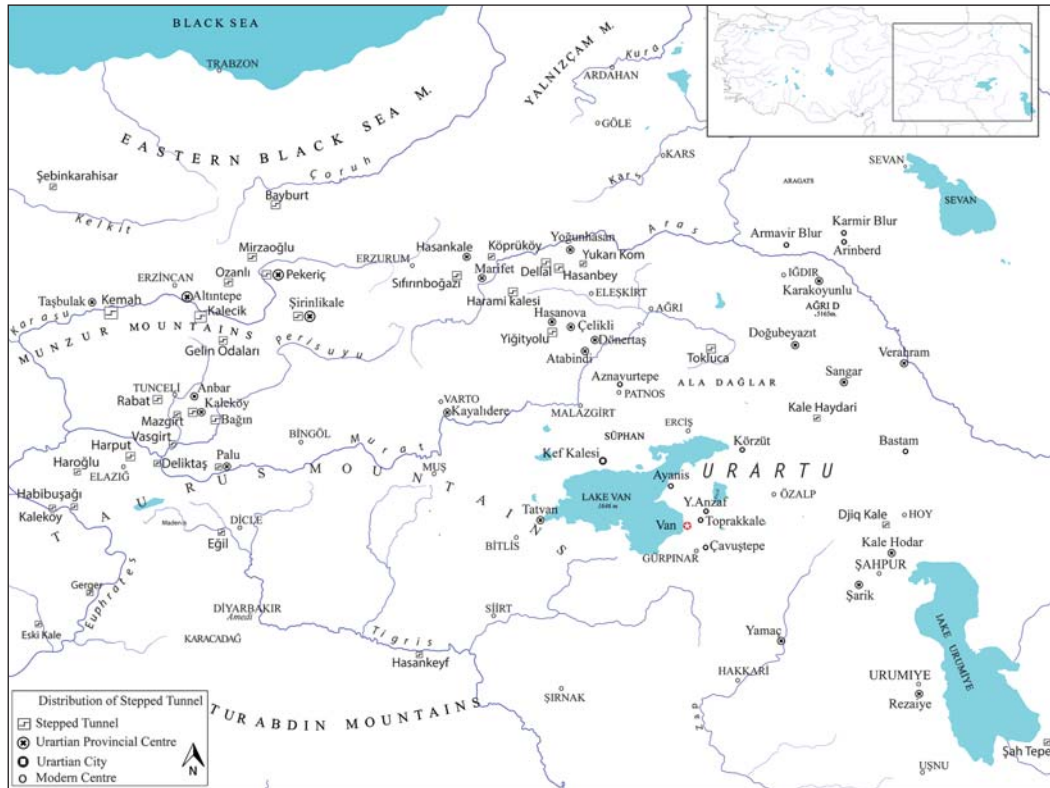


Fig. 2. The distribution of stepped rock-cut tunnels in Eastern Anatolia and surrounding regions.

While two single-chambered rock-cut tombs at Bağın were once thought to be Urartian,<sup>5</sup> later they were found to belong to the Hellenistic-Roman period.<sup>6</sup> There are no distinct remains that can be dated to the Urartian period at Bağın. About 10 years after Burney, von Gall reviewed stepped tunnels in many regions of Anatolia, starting from Phrygia.<sup>7</sup> This study includes a total of six fortresses and stepped tunnels in Eastern Anatolia, at Palu, Bağın, Kemah, Pekerç, Hasankale and Toprakkale. Von Gall, like Burney, dated all but Pekerç and Kemah to the Urartian period.

Following these preliminary reports, stepped rock-cut tunnels found at fortresses in Eastern Anatolia have been accepted as one of the criteria identifying Urartu. Thus, Kleiss, Hauptmann, Barnett, Salvini, Köroğlu, Zimansky, Çevik, Kroll, Sevin,<sup>8</sup> and many other researchers have

<sup>5</sup> Çevik 2000, p. 126.

<sup>6</sup> Köroğlu 2007.

<sup>7</sup> von Gall 1967, p. 520.

<sup>8</sup> Kleiss 1976; Kleiss and Hauptmann 1976; Hauptmann 1972, p. 113; Barnett 1982, p. 362; Salvini 1995, pp. 147–148; Köroğlu 1996; Zimansky 1998, p. 181 no. 781; Çevik 2000; Kroll 2011, pp. 157–158. Sevin (Sevin *et al.* 2011, pp. 228–229) was cautious in associating stepped rock-cut tunnels with the Kingdom of Urartu. He wrote that the tunnels were located in the periphery rather than the central region of Urartu.



Fig. 3. A detailed view of fortification wall of Bağın citadel.

accepted stepped rock tunnels as features that are important indications of the Urartian period in dating fortresses and sites.

It seems that the expertise of the Urartians in stone masonry has been a factor in this idea becoming the common view. Numerous striking examples of Urartian construction works in Eastern Anatolia such as citadels, monumental fortifications, stepped rock-cut foundations, open-air altars in the form of gates, canals and ponds have overshadowed similar remains that may have been built in different time periods in the region. For this reason, a majority of the fortresses in Eastern Anatolia, rock-cut tombs and stepped tunnels have been associated with Urartu without discussion.

Stepped rock-cut tunnels and associated fortresses in Eastern Anatolia have not so far been evaluated as a whole, and the main bases for their dating have not been questioned. For example, the types of stepped rock-cut tunnels in the region and their functions have not been sufficiently studied. Moreover, the precise spread of these tunnels in Eastern Anatolia and their relationship with other tunnels beyond Eastern Anatolia are also unknown.

In recent years Köroğlu, one of the present authors, suggested in a study on rock-cut tombs in Eastern Anatolia that among the tombs that until then had been dated to the Urartian period,

those with single chambers may have been built in the Hellenistic and Roman periods.<sup>9</sup> This evaluation shows that the stone masonry expertise in the region is not limited to Urartu, and it encouraged us also to study and discuss stepped rock-cut tunnels using a similar method.

In this article, we study and evaluate 10 stepped rock-cut tunnels at seven separate fortresses in the province of Elazığ, 11 tunnels at seven fortresses in the province of Tunceli, seven tunnels at six fortresses in the province of Erzincan, nine tunnels at eight fortresses in the province of Erzurum, and one tunnel in the province of Ağrı (Fig. 2). We discuss our findings at these places, also with reference to the stepped rock-cut tunnels in the provinces of Ordu, Samsun, Tokat, Giresun, Kastamonu, Sinop, Amasya in the Black Sea region; in Çorum, Ankara, Eskişehir and Konya in Central Anatolia; and in Diyarbakır, Adıyaman and Batman in Southeastern Anatolia (Figs 1–2). We will first consider the types of stepped rock-cut tunnels encountered in Eastern Anatolia, the purposes of their construction, their areas of use, and the areas of their distribution. We will then discuss their dating and our interpretation of the period of their arrival in the region of Urartu.

### Types of Stepped rock-cut Tunnels

Stepped rock tunnels are placed within or on the edges of fortresses built on high rocky places. While these tunnels look similar at first sight, they can be organised into two groups and there are both typological and functional differences between them. Stepped rock-cut tunnels of the first group were built within the fortification walls surrounding the fortresses, cut down into the rocks starting from the surface. The tunnels within this group do not have any exits (Type A). The tunnels in the second group start within the fortification walls, wind down the side of the fortress and reach the water beside the rocky hills (Type B). Characteristics identifying these groups are as follows:

#### *Type A: Stepped Rock Tunnels without Exits*

- They are made within the fortification walls and they do not have exits.
- There is rocky ground or a closed gallery at the end of the tunnel (Fig. 4).
- They are cut from the top of the rocks to the ground, with an inclination of 30–45 degrees.
- The ceiling of the tunnel is usually barrel vaulted (Fig. 5).
- Some, like the tunnel at Pekerç, have water canals directed toward the tunnel entrance.
- Dimensions may vary. In the examples we visited, the width of the tunnels is 2.5–3 m, the number of steps is over 50 (Şirinlikale), and the depth is c. 30–40 m (Fig. 4).

In Eastern Anatolia, in the area that falls within the land of Urartu, fortresses at Erzincan/Şirinlikale and Pekerç (Fig. 5) contain this type of stepped tunnel. The stepped tunnels at Elazığ/Harput, Palu and Mazgirt/Kaleköy can also be included in Type A, with some small variations.

<sup>9</sup> Koroğlu 2007, 2008.



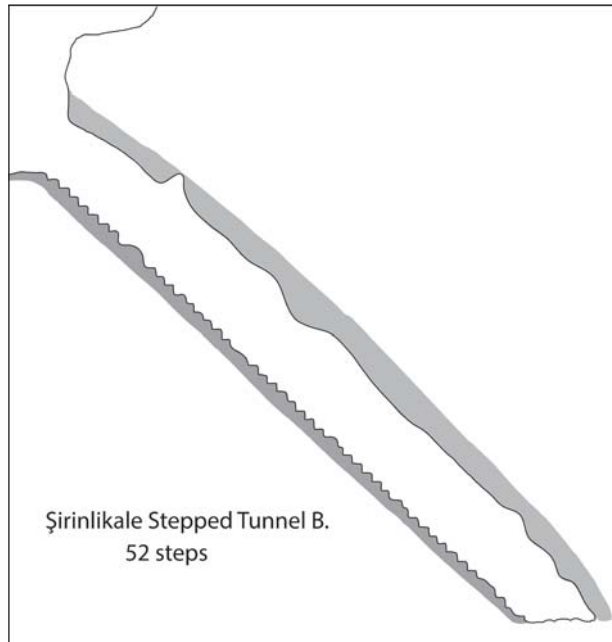


Fig. 4. The section of the stepped rock-cut tunnel at Şirinlikale (Type A).



Fig. 5. The stepped rock-cut tunnels at Pekerîç (Type A).



Fig. 6. The stepped rock-cut tunnels at Bağın (Type B).



Fig. 7. The stepped rock-cut tunnels at Sinop/Boyabat (Type B).

In the latter three examples, the tunnels continue with a bend to the right or left. The tunnel at Kale Haydari in Northwest Iran also belongs to this group (Table 1, Fig. 2).

*Type B: Stepped Rock Tunnels that Go down the Side of the Fortress to the Water Source*

- The tunnel starts within the fortress, goes under the fortification walls, running close to the outer edge of the rocks on which the fortress is built; sometimes, from the edge, the tunnel goes down to the water source.
- They are usually cut in a spiral form.
- The tunnels may have more than one exit. One of the two tunnels at Tunceli/Bağın Fortress has two exits.
- This type of stepped rock tunnels may have openings in the form of windows for light. This is observed in the tunnels at the fortresses in Tunceli/Bağın (Fig. 6), Tunceli/Gelin Odaları, Dellal and Boyabat.
- The length and width of the tunnels vary according to the size of the fortress and the height of the rocks. The stepped tunnel at Kemah, which is the largest example of this type in Eastern Anatolia, is 350 m long and more than 5 m high.

## Functions

Stepped rock tunnels without exits (Type A) must have been built as a kind of water tank/cistern. Indeed, two tunnels at Harput Fortress and the tunnels at Şebinkarahisar Fortress can still store water. Channels carved into the bedrock start about 7–8 m north of the tunnel at Pekerîç Fortress and run to the entrance of the tunnel. In addition, a 30 cm-wide channel was carved into the rock to the left of the tunnel entrance. It seems that rain water and melted snow were directed to the stepped tunnel through these channels and collected there.

The stepped tunnel at Harput Fortress is known as the “Artukid dungeon” and has been recently cleared. The end of the tunnel opens into a closed gallery. Three separate pools were carved into the rock within this gallery, side by side. Today, these pools hold water even in the summer months. There are two openings at two separate locations on the ceiling of the tunnel. These openings were previously thought to have been made to let the light in;<sup>10</sup> however, recent excavations unearthed a round-plan pool on the top of the opening. Water pipes that appear to come from different parts of the fortress are visible. Rain water was probably poured into the tunnel through the pipes and collected there. Similarly, an opening in the roof near the tunnel entrance is visible at the stepped tunnel at Mazgirt/Kaleköy.

The temperature in the stepped rock-cut tunnel at Palu Fortress was found to be 15°C lower than the outside temperature in August.<sup>11</sup> This suggests that Type A stepped rock tunnels could also have been used for storing perishable products in the summer months. While there are not too many of this type of tunnel in Eastern Anatolia, they have been documented at over 20 fortresses in the Black Sea region and Central Anatolia (Figs 1–2). At Şirinlikale in Eastern Anatolia, Type A and Type B tunnels appear together.

Tunnels built in the form of spirals, which we have labelled Type B, must have been used to get water from the streams that flow next to the rocks and to exit the fortresses during sieges. Indeed, all of these tunnels lead to a stream or river. This type of tunnel is more common than Type A, and most of the tunnels in Eastern Anatolia are of this type (see Table 1).

## Distribution

**Eastern Anatolia:** Fortresses with stepped tunnels within the Kingdom of Urartu are concentrated in the Elazığ and Tunceli area and the Erzurum, Erzincan, Ağrı areas to the north (see Table 1 and Fig. 2). There are no known stepped tunnels at Van (Tuşpa), the capital of the Kingdom of Urartu, or in its vicinity, that are directly similar to the examples in Muş and Bingöl that we have discussed. Two of the three published examples from Northwest Iran are located just to the east of the Turkey-Iran border at Kale Haydari and at Djiq Kale.<sup>12</sup> The third was identified to the southeast of Lake Urmia at Şahtepe. No archaeological finds that can be dated

<sup>10</sup> Sevin *et al.* 2011, pp. 217–243.

<sup>11</sup> We thank Acting Director of Elazığ Museum Bülent Demir and archaeologists Mikail Tofur and Ercan Kan for supplying us with detailed information during clearance work at this tunnel at the Palu Fortress.

<sup>12</sup> Kleiss 1976 (Kale Haydari); Kleiss and Kroll 1979 (Djiq Kale).



to the Urartian period were identified at the fortress of the same name, and it was suggested that this fortress may have been built in the Urartian period based only on the existence of the tunnel.<sup>13</sup>

**Middle Black Sea region and its vicinity:** The Middle Black Sea region (ancient Pontus) appears to be the area where fortresses with one or two, and rarely three stepped tunnels are most common. As mentioned above, numerous fortresses with similar characteristics have been identified in this region in Ordu, Samsun, Tokat, Giresun, Kastamonu, Sinop and Amasya (Figs 1, 7).<sup>14</sup> While not as numerous, fortresses with stepped rock-cut tunnels are also found in Central Anatolia in the provinces of Ankara, Eskişehir and Konya;<sup>15</sup> and in Southeast Anatolia in the provinces of Diyarbakır, Adıyaman and Batman (Fig. 2).<sup>16</sup>

These examples cannot have developed independently of each other based on the general overview of the distribution of stepped rock-cut tunnels. Stepped rock-cut tunnels in Eastern Anatolia appear to be the continuation of those in the Middle Black Sea region. The distribution of the stepped tunnels in Anatolia is similar to the area conquered by Mithridates VI (120–63 BCE) and brought within the borders of Pontus. According to Strabo (12.3.1), the eastern border of the country contained the west and north of Eastern Anatolia, extending to Colchis. As can be seen on the distribution map (Fig. 2), fortresses with stepped rock-cut tunnels decrease in number but reach as far as the west of Northwest Iran in the east, Southeast Anatolia in the south, and the region of Phrygia in the west.

Table 1: The list of stepped tunnels in Eastern Anatolia and its immediate vicinity.

Castles with stepped rock-cut tunnel	City	Number of tunnels	Single-chambered rock-cut tomb	Multi-chambered rock-cut tomb	Type	References
Habibuşağı (İzoli)	Elazığ	2			Type B	(Öğün 1984)
Palu	Elazığ	2		3	Type A	(von Gall 1967; Charlesworth 1980)
Harput	Elazığ	2			Type A	(Sevin <i>et al.</i> 2011)
Deliktaş	Elazığ	1			Type B	(Hauptmann 1972)
Kaleköy	Elazığ	1				(Bakır & Çilingiroğlu 1987)
Haroğlu	Elazığ	1	3?			(Sevin 1988)
Karakaş Kalesi	Elazığ	1				(Danık 2002)

<sup>13</sup> Kleiss 1974, pp. 103–106

<sup>14</sup> von Gall 1967; Olshausen and Biller 1984, Map; Hojte 2009, p. 103.

<sup>15</sup> Osten 1929, pp. 125–136.

<sup>16</sup> von Gall 1967.

Castles with stepped rock-cut tunnel	City	Number of tunnels	Single-chambered rock-cut tomb	Multi-chambered rock-cut tomb	Type	References
Bağın	Tunceli	3	2		Type B	(Burney 1957; von Gall 1967)
Mazgirt Kalesi	Tunceli	1	2		Type B	(Kleiss & Hauptmann 1976)
Rabat Kalesi	Tunceli	2	2		Type B	(Danık 2010)
Kaleköy/Mazgirt	Tunceli	1	1	1	Type A	(Wünsch & Müller 1888)
Gelin Odaları	Tunceli	1	3		Type B	(Danık 2010)
Vasgirt	Tunceli	2	5			(Danık 2002)
Kaletepe	Tunceli	1				(Danık 2010)
Ozanlı	Erzincan	1				(Ceylan 1999)
Kemah	Erzincan	1			Type B	(Sinclair 1989; Yurttaş <i>et al.</i> 2013, p. 422)
Pekeriç	Erzincan	1	2	1	Type A	(von Gall 1967; Sinclair 1989, p. 250)
Şirinlikale	Erzincan	2	1	1	Type A-B	(Işık 1987; Sinclair 1989, p. 247)
Kalecik	Erzincan	1			Type B	(Ceylan <i>et al.</i> 2015)
Mirzaoğlu Kalesi	Erzincan	1				(Ceylan 2001)
Hasanbey Kalesi	Erzurum	1				(Üngör <i>et al.</i> 2014)
Harami Kalesi	Erzurum	2				(Başgelen 1985; Ceylan 2002)
Sıfırınboğazı	Erzurum	1			Type B	(Ceylan 2004)
Yığıtyolu	Erzurum	1				(Bingöl <i>et al.</i> 2010)
Dellal Kaya	Erzurum	1			Type B	(Ceylan 2005; Topaloğlu <i>et al.</i> 2011)
Yukarı Kom	Erzurum	1				(Topaloğlu <i>et al.</i> 2012)
Köprüköy/Kaptır	Erzurum	1	1?		Type B	(Ceylan <i>et al.</i> 2008)
Küçükçağdarış	Erzurum	1				(Ceylan 2002)
Tokluca Kalesi	Ağrı	1				(Başgelen 1985)
Kale Haydari	Hazerlu	1				(Kleiss 1976)
Djik Kale	Khoy	1				(Kleiss & Kroll 1979)

## Dating

As we have noted above, stepped rock-cut tunnels in Eastern Anatolia have been accepted as one of the basic criteria pointing to the Urartu period since the interpretations of Lehmann-Haupt, Burney and von Gall. Therefore, it will be appropriate to start the discussion on dating by questioning their association with Urartu. Our discussion here is based to a significant extent on our observations in Eastern Anatolia in 2015–2016, conducted with the permission of the Ministry of Culture<sup>17</sup> within the scope of research for the doctoral dissertation of H. Danişmaz, on “The Provincial System of Urartu.”

According to our observations in the areas of Erzurum, Erzincan and Ağrı, there are no stepped tunnels in fortresses/local administrative centres such as Marifet, Taşbulak, Yoğunhasan, Hasanova, Çelikli, nor also Kayalıdere and Yamaç,<sup>18</sup> that were not settled again after the Urartian period. The most significant criterion in dating these fortresses to the Urartian period is the existence of multi-chambered rock-cut tombs, of the type we know from Van Fortress at the capital and at local administrative centres.<sup>19</sup> In addition, there are no stepped rock-cut tunnels at administrative centres built by the Kingdom of Urartu that feature all of the Urartian criteria together,<sup>20</sup> such as Van Fortress (Tuşpa), Yukarı Anzaf, Çavuştepe (Sardurihinili), Ayanis (Rusaḫinili <sup>KUR</sup>Eidurukai), Körzüt, Kef Fortress (Ḫaldiei URU), Aznavurtepe, Armavir Blur (Argištihinili), Arin Berd (Erebuni), Karmir Blur (Teişebai URU) and Bastam (Rusai-URU.TUR). The stepped tunnel at Toprakkale (Rusaḫinili) is not similar to the Type A or B examples we discuss here, which were associated with water.<sup>21</sup> There are also no stepped rock tunnels in the Lake Van basin, the heartland of the Urartu. As can be seen, it is not possible to claim that stepped tunnels were products of Urartian culture based on finds from Urartian-period fortresses and citadels.

Urartian remains and stepped rock tunnels are observed together at four fortresses we were able to identify in Eastern Anatolia. There are also remains that can be dated to the later periods than the Urartian period at all of these fortresses. Stepped tunnels at Palu, Kaleköy/Mazgirt, Pekiçi and Şirinlikale, which feature multi-chambered Urartian rock tombs (see Table 1), can be discussed in this context. An *in situ* Urartian cuneiform inscription, three multi-chambered rock tombs and rock signs at Palu are the most distinct criteria for the Urartian period.<sup>22</sup> In addition, there are dense building and wall remains at the fortress that belong to the medieval period. There are single-chambered rock tombs and wall remains dating to the Hellenistic-Roman period in addition to multi-chambered Urartian rock-cut tombs at Kaleköy/Mazgirt, Pekiçi and Şirinlikale in this group. As can be seen, it is difficult to establish an acceptable association between Urartu and

<sup>17</sup> We would like to express our gratitude to the Ministry of Culture and Tourism for permission and to the Marmara University Research Fund for their financial support.

<sup>18</sup> Başgelen 1986 (Marifet); Özgül *et al.* 2013 (Taşbulak); Belli and Ceylan 2002 (Yoğunhasan); Başgelen 1986, Çevik 2000 (Çelikli); Burney 1966 (Kayalıdere); Sevin 2015 (Yamaç).

<sup>19</sup> Köroğlu 2007; Konyar 2011.

<sup>20</sup> Köroğlu 2011, pp. 25–35.

<sup>21</sup> The entrance of the Toprakkale tunnel is square-shaped. There is no indication that water was brought to the entrance cut on the side face of the rock. The area reached by steps after the entrance was unfinished, with a rectangular plan, and looks like a rather large room/storage. There is no sign that water was collected here. The stepped part is not in the form of a tunnel.

<sup>22</sup> Sevin 1994; Köroğlu 1996, pp. 15–16.

stepped rock-cut tunnels based on these fortresses. Together with other evidence we have discussed, it can be said that the stepped tunnels at these fortresses can be associated with the cultures dating after the Urartian Kingdom.

The great majority of fortresses with stepped rock-cut tunnels only have mortared fortification walls postdating Urartu and building remains dating to the medieval period (see **Table 1**).<sup>23</sup> In particular, the stone masonry with mortar fill and bossage that covers the open parts of the stepped rock-cut tunnel at Kemah fortress, which developed as an important base in the Early Roman period, clearly dates to periods after the Urartian period. The 350 m-long stepped rock-cut tunnel that starts from the east of Kemah Fortress and reaches the Tanasur stream flowing 50–60 m below is the largest example in Anatolia.<sup>24</sup> There are no remains there going back to the Urartian period.

Since most of the stepped rock tunnels in Eastern Anatolia are identified by surface surveys, small finds that can help in their dating are missing. In our view, single-chambered rock tombs that are found at one third of the fortresses with stepped rock-cut tunnels in Eastern Anatolia (see **Table 1**) can be discussed as data that can help to date the latter.

Single-chambered rock tombs, like stepped rock-cut tunnels, are generally located to the west of the land of Urartu, at fortresses in the Elazığ-Tunceli region (**Fig. 8**).<sup>25</sup> The association between stepped rock-cut tunnels and single-chambered tombs is not limited to Eastern Anatolia. Similar tombs are common in the area where stepped rock-cut tunnels are distributed, particularly in Amasya (**Fig. 9**) at the centre of the Pontic Kingdom, where they are densely distributed.<sup>26</sup> In light of these connections, it can be said that there was a cultural association between single-chambered rock tombs and stepped tunnels in Eastern Anatolia. A Hellenistic-Roman dating of single-chambered rock tombs in Eastern Anatolia<sup>27</sup> fits with this interpretation.

More distinct finds for the dating of the stepped rock tunnels come from tunnels investigated by archaeological excavations in the Middle Black Sea region. There is a Type A tunnel with 426 steps at Ordu/Kurul Fortress. The tunnel is similar to the stepped tunnels at Pekerîç and Şirinlikale. Archaeological excavations have continued since 2010 at the fortress, which is dated to the first half of the first century BCE.<sup>28</sup> Coins found at the excavations at Cıngırt Kayası, about 40 km north-east of Kurul Fortress, similarly indicate that the fortress was settled from the Hellenistic period (Mithridates VI, 120–63 BCE) onwards, and through the Roman and Byzantine periods.<sup>29</sup> Coins dating to the period of Mithridates VI were found at Tokat/Geyraz Fortress, which has a stepped rock-cut tunnel and has been investigated in recent years.<sup>30</sup>

Von Gall, who reviewed rock-cut tunnels in Anatolia for the first time, associated those in Amasya with the monumental rock-cut tombs of Pontic kings in the same area,<sup>31</sup> despite reaching a different conclusion for rock-cut tunnels in Eastern Anatolia. Hojte, who made further

<sup>23</sup> Sinclair 1989, p. 422.

<sup>24</sup> Yurttaş *et al.* 2013, p. 465.

<sup>25</sup> Köroğlu 2007.

<sup>26</sup> Fleischer 2009.

<sup>27</sup> Köroğlu 2007.

<sup>28</sup> Şenyurt and Akçay 2016, pp. 227–228.

<sup>29</sup> Erol 2015.

<sup>30</sup> Erciyas and Sökmen 2010.

<sup>31</sup> Von Gall 1967, p. 518.

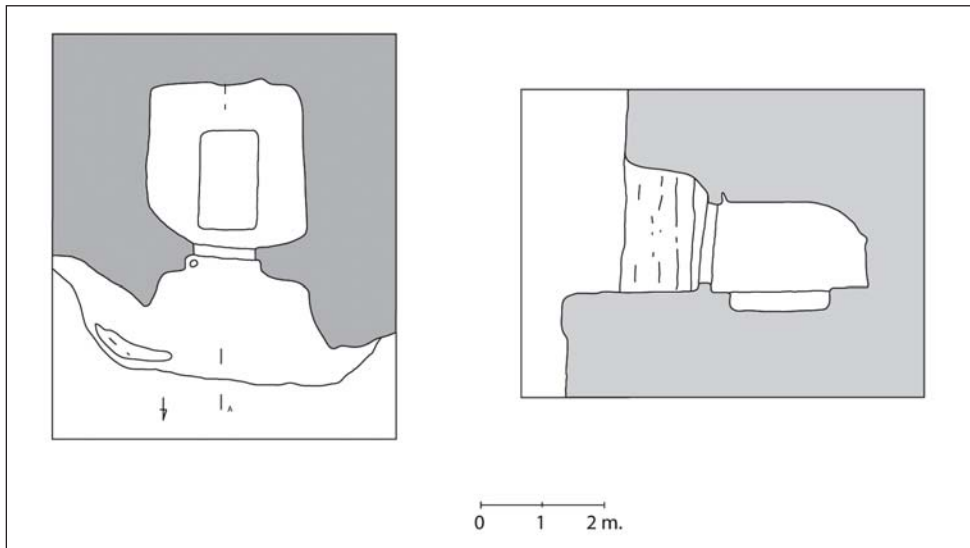


Fig. 8. The plan and section of the single roomed rock-cut tomb at Bağın I (Çevik 2000, pl. 49a).

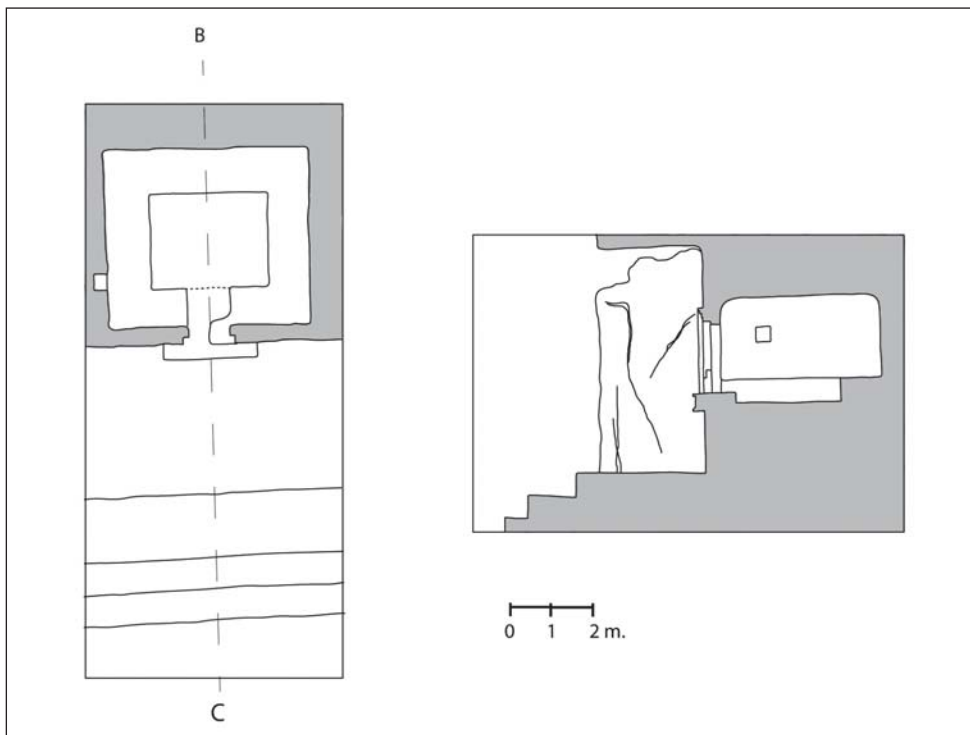


Fig. 9. The plan and section of the single roomed rock-cut tomb at Amasya, dated to the Hellenistic period (Perrot *et al.* 1872, plate 76).

assessments,<sup>32</sup> and Erol, who adopts the same view,<sup>33</sup> specify one or two stepped rock-cut tunnels as the most distinctive criterion when describing the common characteristics of fortresses belonging to the Pontic Kingdom.

It seems that the tradition of building fortresses with stepped rock-cut tunnels started in the Hellenistic period in the Pontus region and spread across a wide area, including a part of Eastern Anatolia, during the Roman period. Distinctive Type A stepped tunnels are represented by only a few examples in Eastern Anatolia, which can be used in support of the evidence indicating their arrival into the region from outside.

## Conclusion

There are two types of stepped rock-cut tunnels in Eastern Anatolia: 1) Stepped rock-cut tunnels without exits (Type A), and 2) stepped rock tunnels that start within a fortress and go down to a water source (Type B). They seem to have been built to supply water, store products and provide exits from fortresses. These types of tunnels have so far been accepted as one of the identifying criteria for the Urartian period in Eastern Anatolia. However, their absence at the capital of the Kingdom of Urartu (Van/Tuşpa) and in its vicinity, at fortresses settled only in the Urartian period, and at the citadels built by the Kingdom of Urartu makes their dating to the Urartu period quite problematic.

Most of the stepped tunnels in Eastern Anatolia are located in the region of Elazığ, Tunceli, Erzincan and Erzurum. The distribution of stepped rock-cut tunnels in Anatolia shows that there is an association between those in Eastern Anatolia and those in the Middle Black Sea region (ancient Pontus). Most of the stepped tunnels in Eastern Anatolia were established in castles founded after the Urartian period. Single-chambered rock tombs dating to the Hellenistic-Roman period are also found at many of these fortresses. This provides clues to the dating of the tunnels. Stone masonry at well-preserved fortresses such as Kemah also indicates that stepped tunnels were made in the Late Hellenistic-Roman periods.

Data from excavations in the Middle Black Sea region also indicate that stepped tunnels belong to the Hellenistic and Roman periods. Data from Hellenistic-period royal tombs in Amasya, and from the stepped tunnels at the fortresses in Ordu/Kurul, Cingirt Kayası and Tokat/Geyraz support this dating. In conclusion, it can be said that stepped rock-cut tunnels are not associated with the Kingdom of Urartu, and that this tradition arrived in the region in the Hellenistic period. It follows that the association between the Kingdom of Urartu and fortresses that are dated solely on the basis of the stepped rock-cut tunnels within them should be opened to discussion again.

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<sup>32</sup> Hojte 2009, p. 103.

<sup>33</sup> Erol 2015, p. 459.



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# Lithic Industry of the Early Chalcolithic in the Southwest Zagros: New Insights from the Middle Bakun Site of Tal-e Mash Karim, Iran

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## Abstract

*Flaked stone assemblages of the Late Ceramic Neolithic to Chalcolithic periods from the Zagros region (sixth and fifth millennium BC) have been collectively assigned to a single industry, termed the Post-Mlefaatian. This paper argues for its potential spatio-temporal variability, with reference to a lithic assemblage of the Early Chalcolithic (Middle Bakun) period recently excavated at the site of Tal-e Mash Karim in the highland plateau of southwest Iran. One important finding of this study is that the Post-Mlefaatian is divisible into at least two phases, distinguishable by a shift in the core reduction method. The preferential use of conical cores for pressure blade production in the early Post-Mlefaatian was replaced by the predominant use of unifacial cores in the later phase, to which the Mash Karim assemblage belongs. This technological shift occurred after the Late Ceramic Neolithic, apparently more or less coincidentally with the significant cultural transformation at the onset of the Chalcolithic period in the highland plateau of the southwest Zagros. A regional survey indicates that a comparable shift occurred in the lithic industry of the Susiana lowlands as well, where the Chalcolithic cultural transformation is believed to have proceeded earlier. These findings provide new insights into testing the current hypothesis that interaction with the Susiana lowlands played a substantial role in the Neolithic-Chalcolithic transition in the highland plateau, which has been discussed in the current literature from ceramic perspectives alone.*

**Keywords:** *Chalcolithic, Bakun culture, Zagros Mountains, Susiana lowlands, Mlefaatian/Post-Mlefaatian industries.*

## Introduction

The emergence of the Bakun culture during the fifth millennium BC marks the onset of the Chalcolithic period in the Fars Province, southwest Iran, when a range of substantial socioeconomic changes occurred across the region. Those changes included the growth of settlements in number and size, the occurrence of a two-tiered settlement-size hierarchy, the wide use of administrative objects, the development of metallurgy and craft specialisation, and the introduction of a fine black-on-buff ceramic ware of the Bakun type, indicating an increase in social complexity during this period.<sup>1</sup> Accordingly, the emerging processes of this culture have attracted much attention

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<sup>1</sup> Alizadeh 2009; Weeks *et al.* 2010; Helwing and Seyedin 2010.

in research on Chalcolithic southwest Iran, involving debates on the origin of the Bakun ware. This particular ware shows different features from those of the late Neolithic ware of the Sham-sabad type that preceded it locally, while displaying certain similarities with the fine wares in the Susiana lowlands, where painted ceramic traditions started earlier than in the plateaus of the Zagros Mountains. Several theories have been put forward emphasising the cultural interaction between these regions, which might have played a major role in the formation of the regional Early Chalcolithic society.<sup>2</sup>

This paper refers to a flaked stone assemblage from the Early Chalcolithic period of the southwest Zagros highlands of Iran. Representing a late Stone Age phase in the region, lithic assemblages of this time period have been studied far less than pottery, conforming to the general trend common in research on the late prehistoric period. However, lithic analysis is expected to help clarify the cultural processes of the Bakun period from viewpoints different from those obtained through research on pottery and other remains.

The Late Ceramic Neolithic to Chalcolithic lithic assemblages of the Zagros region are considered to collectively represent the latest part of the enduring Mlefaatian tradition originating from the Aceramic Neolithic. According to the initial model of Kozłowski,<sup>3</sup> the Mlefaatian tradition is divided into three stages. The oldest is the Early Mlefaatian of the Aceramic Neolithic (tenth to mid-seventh millennium BC), characterised by the common practice of bladelet production with pressure debitage and the manufacturing of backed bladelets. In the Late Mlefaatian, which developed in the Early Ceramic Neolithic (late seventh millennium BC), geometrics appeared in the tool category, while the manufacturing of backed bladelets continued. The final stage is the Post-Mlefaatian, spanning from the Late Ceramic Neolithic to the Chalcolithic (sixth and fifth millennia BC), which included the Bakun period; the production of ordinary blades with pressure flaking for sickle elements became popular and backed bladelets disappeared. This general framework was proposed in the 1990s using limited data. Much additional data has become available in recent decades from newly conducted excavations, artefact re-examination using modern analytical techniques, and radiocarbon dating, enabling testing or revision of the initial model. While such attempts have already started for the Neolithic,<sup>4</sup> research has yet to be undertaken on the Chalcolithic assemblages.

Representing an effort in this direction, this study examined the techno-typological features of the Middle Bakun flaked stone assemblage from Tal-e Mash Karim (hereafter, Mash Karim), dated to the mid-fifth millennium BC. Mash Karim is a single-period site. Therefore, it provides a unique opportunity to define its lithic assemblage without the possibility of mixing with materials from other periods. This paper aims to characterise its lithic assemblage and show its potential contribution to understanding the transition from the Late Ceramic Neolithic to the Early Chalcolithic.

<sup>2</sup> Alizadeh 2006, 2009; Weeks *et al.* 2010; Miki 2014.

<sup>3</sup> Kozłowski 1999.

<sup>4</sup> Nishiaki 2013, 2016; Nishiaki *et al.* 2013; Abe and Azizi Kharanaghi 2014.



### The site of Mash Karim

Mash Karim is a prehistoric mound located approximately 130 km south of Esfahan, a borderland between the Fars and Esfahan provinces of southwest Iran (Fig. 1). The mound covers an area of *c.* 0.5 ha and rises to a height of *c.* 2 m above the surrounding field (Fig. 2). It is situated at an altitude of 2360 m above sea level on a highland plain that today enjoys a mild but dry climate. Average annual precipitation is around or below 300 mm, allowing dry farming on a limited scale.



Fig. 1. Archaeological sites mentioned in the text (©2013 Google).

The excavation was conducted in 2014, involving investigations of three trenches.<sup>5</sup> Trenches A and B, each measuring 5 × 5 m, comprised the main excavation area at the central part of the mound (Fig. 2), while Trench C (2 × 1 m) was opened to test the stratigraphic sequence of A and B. Virgin soil was reached at the northeastern corner of Trench B and the southern half of Trench C at around 2 m below the surface. The occupational deposits were divided into four layers but they yielded only one architectural horizon, consisting of a rectangular room with mud brick walls.

<sup>5</sup> Sardari and Taheri 2015; Sardari *et al.* in press.

Table 1. General inventory of the lithic artefacts from Tepe Mash Karim.

Categories	Chert	Limestone	Total	%
<b>Cores</b>	<b>6</b>		<b>6</b>	<b>3.1</b>
Pressure-blade cores	2		2	1.0
Blade core, single platform	1		1	0.5
Flake core, single platform	1		1	0.5
Blade core, multi-platform	1		1	0.5
Core fragment	1		1	0.5
<b>Debitage</b>	<b>97</b>		<b>101</b>	<b>52.6</b>
Core-edge flakes	3		3	1.6
Core-tablets	2		2	1.0
Cortex flakes	1		1	0.5
Part-cortex flakes	9		9	4.7
Flakes	24	2	26	13.5
Part-cortex blades	8		8	4.2
Blades	33		33	17.2
Chips & fragments	17	2	19	9.9
<b>Retouched tools</b>	<b>83</b>		<b>83</b>	<b>43.2</b>
<b>Palaeolithic pieces</b>	<b>2</b>		<b>2</b>	<b>1.0</b>
Total	188	4	192	100.0
%	97.9	2.1	100.0	

The non-use of sieving for the excavation may have affected the recovery rate of smaller archaeological remains such as chips and fragments of lithic artefacts (see Table 1). Nevertheless, the recovered finds include a sufficiently large variety of artefacts such as pottery, flaked and ground stone tools, bone tools, clay objects, stone beads, rare copper objects, and abundant animal remains. The overall characteristics of the assemblages indicate affinities with the assemblages from Tall-i Gap,<sup>6</sup> a Middle Bakun site in the Marv Dasht plain, Fars, approximately 250 km southeast. Ceramics assignable to this period have also been found at Tappe Mehr Ali and Tole-Nurabad, about 125 km northwest of Marv Dasht (Fig. 1).<sup>7</sup> The discovery of Mash Karim demonstrates that this cultural entity was distributed much farther to the north. The radiocarbon dates obtained from Trench B point to a short period of occupation at this mound ( $5583 \pm 28$  bp;  $5597 \pm 28$  bp;  $5654 \pm 29$  bp), which is assignable to the mid-fifth millennium BC, *c.* 6450 and 6350 cal BP.<sup>8</sup>

<sup>6</sup> Egami and Sono 1962.

<sup>7</sup> Sardari *et al.* 2011.

<sup>8</sup> Sardari *et al.* in press.

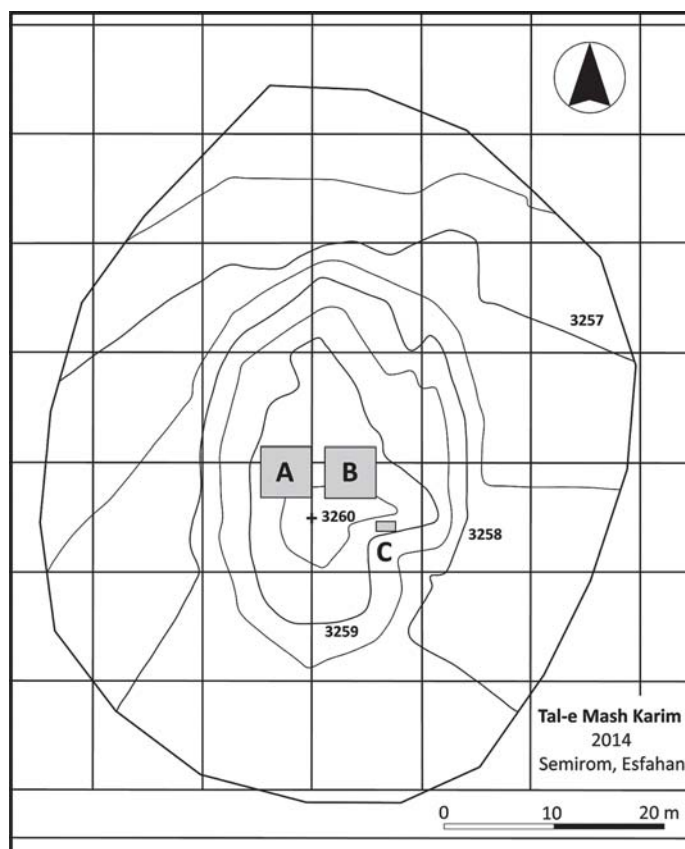


Fig. 2. The plan and excavation areas of Mash Karim (Sardari and Taheri 2015).

## The lithic assemblage from Mash Karim

### *Raw Material*

A total of 192 lithic specimens were recovered (**Table 1**), consisting of 188 chert (97.9 per cent) and four limestone pieces (2.1 per cent). The chert items include two heavily water-rolled artefacts, probably derived from a Palaeolithic period and thus irrelevant to the Chalcolithic assemblage. On the other hand, the limestone specimens include two amorphous fragments, which seem to be accidentally fractured pieces rather than intentional artefacts. Because limestone was often used for ground stone artefacts, these fragments may have been derived from ground stone manufacturing and use.

The chert utilised by the community at Mash Karim includes a group of *radiolarites*, widely utilised for flaked stone artefacts in the prehistoric Zagros region. This stone displays a variety of surface colours ranging across reddish-brown, reddish-grey, green, or greenish-grey, to name a few. Most specimens exhibit internal veins, although they are sufficiently fine-grained not to

hinder tool manufacturing. The morphological configuration of cortex indicates that round pebbles were the main material (Fig. 3: 2–4), but tabular chert was also exploited (Fig. 3: 1, 5). Given the lack of detailed data on the local distribution of chert outcrops, it cannot be stated whether this collection includes exotic materials imported to the settlement. Regardless, the presence of cores and abundant debitage indicates common on-site knapping (Table 1).

### *Core Reduction Technology*

The collection includes three cores with traces of blade removals (Fig. 3: 1–3), two with flake removals (Fig. 3: 4, 5), and one thermally damaged core fragment (Table 1). The cores with blade scars include two pressure-flaked examples (Fig. 3: 1, 2). A series of regular blades was detached from a single platform, and the blade removal scars remain on only one surface. The back surface is covered with cortex. The platform of one core shows careful faceting (Fig. 3: 1), although that of the other core had been removed from later flaking. Faceting traces are seen on core tablets as well (Fig. 3: 6); the platform faceting seems to have been a common practice for core reduction at Mash Karim. There is no crested blade in this collection. However, the occurrence of edge preparation for cores (Fig. 3: 1) suggests the practice of cresting for core preparation.

The remaining core with blade removal scars was reduced with direct percussion (Fig. 3: 3). It was made on a split round pebble, and blades were detached from a non-flaked cortex platform. The two flake cores consist of a single-platform core on tabular chert (Fig. 3: 5) and a multiple-platform core on a round pebble (Fig. 3: 4). Both of these cores show the practice of platform faceting.

Core reduction at Mash Karim clearly centred on blade production. Blades comprise more than half of the unretouched blanks (53.4 per cent; 41/77) and up to 90 per cent of the retouched blanks (72/80), constituting about three-quarters of the total (72.0 per cent; 113/157). While a small number of blades seem to have been detached through direct percussion (Fig. 4: 2), the vast majority are undoubtedly products of pressure flaking (Fig. 3: 7–11); the latter exhibit full technological features matching the criteria listed by Inizan *et al.*,<sup>9</sup> such as the highly rectilinear and regularly parallel arrises of blades and small punctiform butts.

Complete blades range in size from 24 to 59 mm in length and 5 to 18 mm in width. Broken blades include larger pieces, up to 68 mm long and 21 mm wide. The presence of blades longer than the cores (maximum 43 mm long) suggests the exhaustion of cores. The pieces in this assemblage that reflect core management consist of three core tablets (two unretouched and one retouched) and three core edge flakes. Given that the assemblage generally represents material from on-site core reduction and two pressure blade cores exist, we may consider that blade removal sessions were repeated roughly three times for each core, involving core rejuvenations twice.

The distribution of blade widths shows that those 12–13 mm wide are most numerous (Fig. 5). Narrower bladelets in the assemblage (Fig. 3: 8–11) are probably products of a later session of repeated core reduction. The graph also suggests the presence of another cluster around 16–17 mm

<sup>9</sup> Inizan *et al.* 1999.

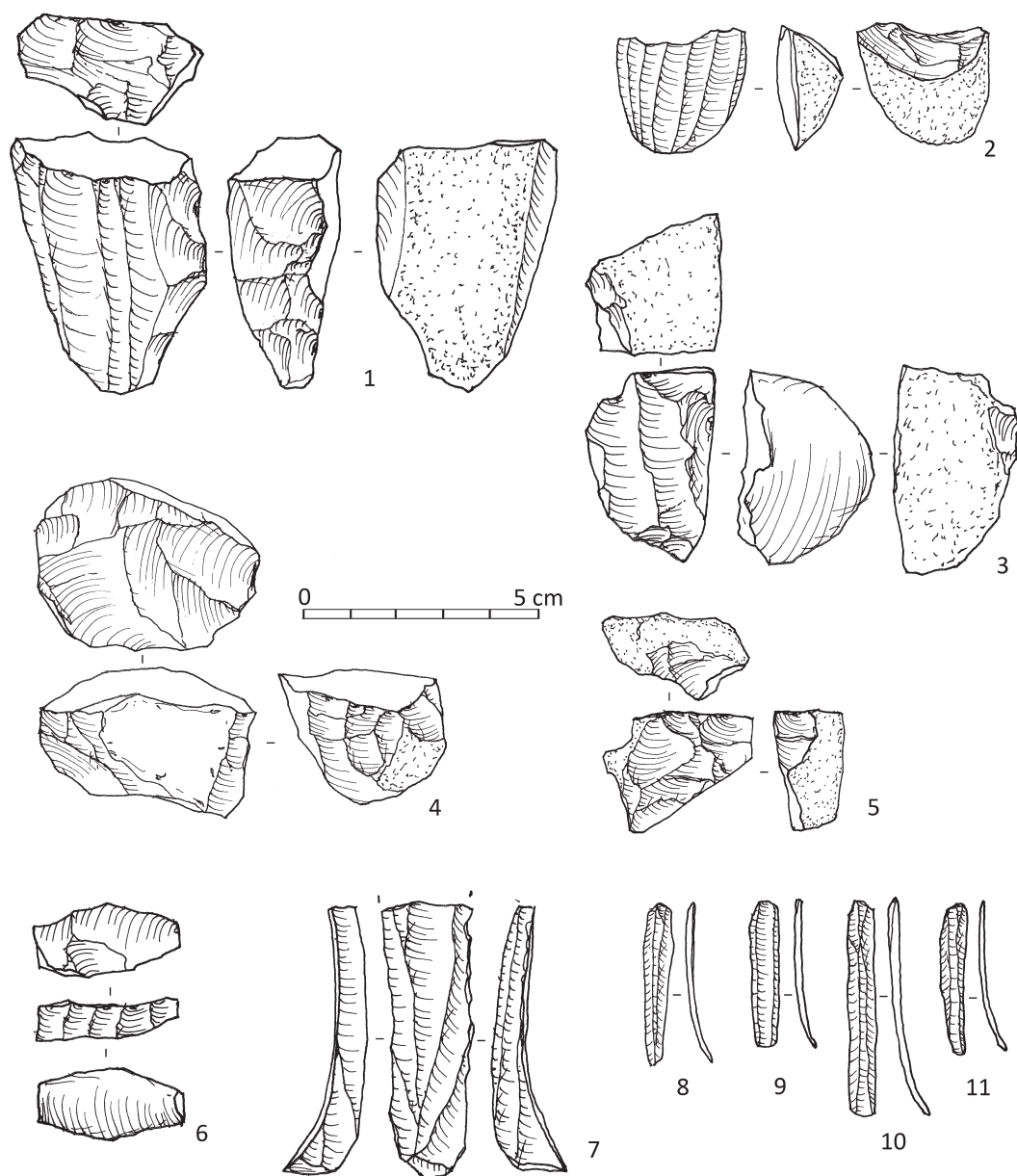


Fig. 3. Cores and debitage from Mash Karim. 1, 2: Pressure blade cores; 3: Percussion blade core; 4: Multiple-platform flake core; 5: Single-platform flake core; 6: Core tablet; 7: Plunging blade; 8–11: Pressure bladelets.

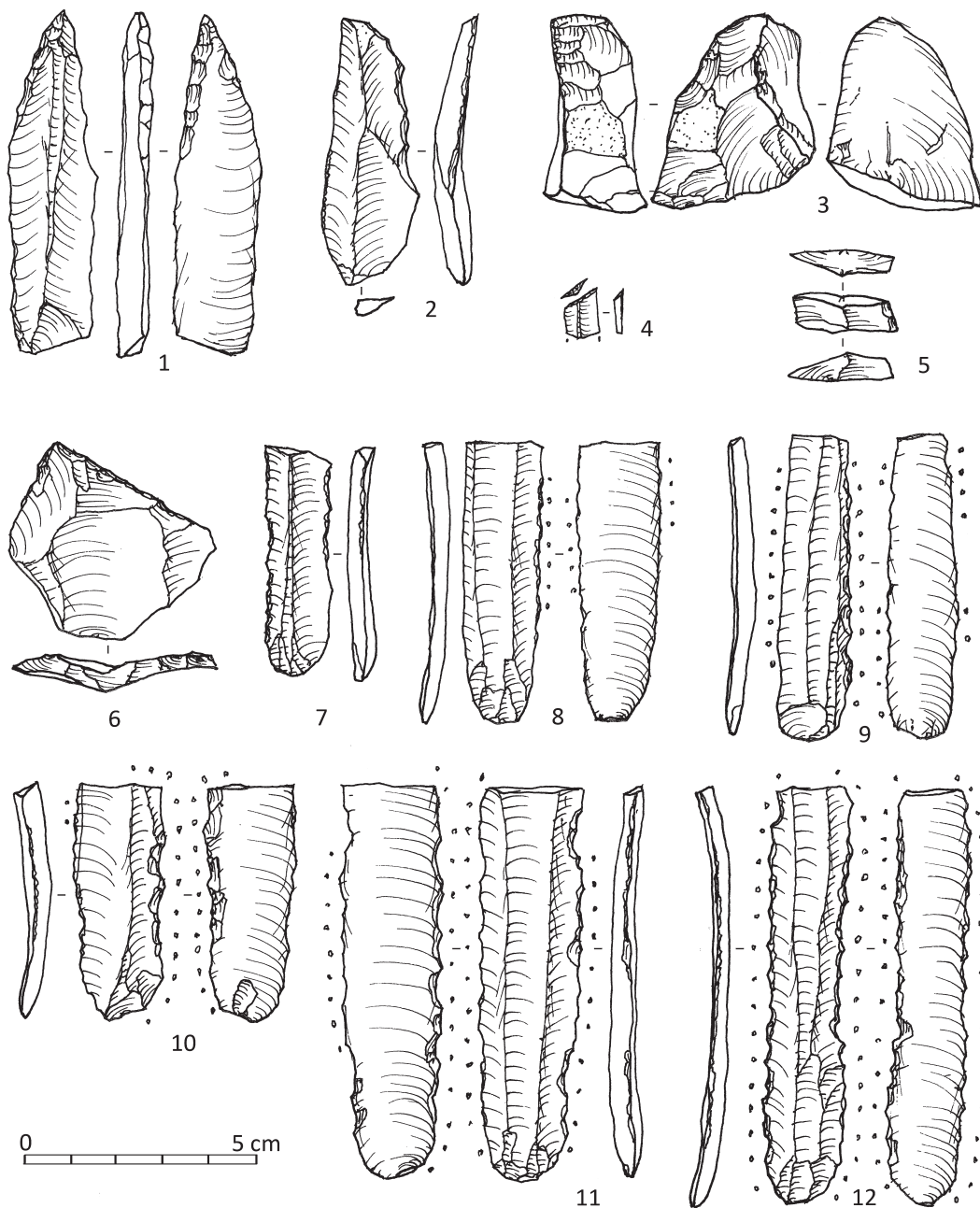


Fig. 4. Retouched tools and related artefacts from Mash Karim. 1: Borer; 2: Backed knife; 3: Endscraper; 4: Truncated blade; 5: Thin section; 6: Retouched flake; 7: Retouched blade; 8–12: Sickle elements.



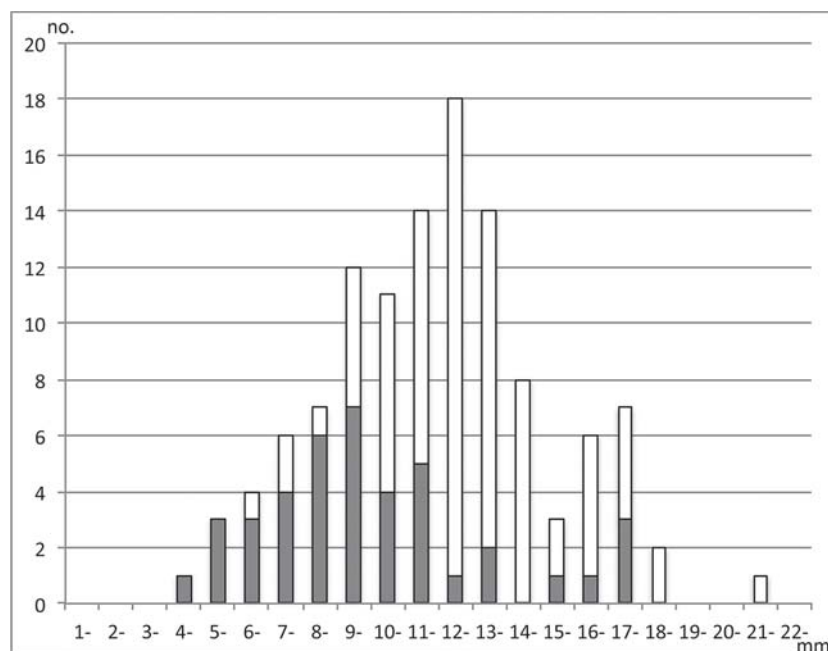


Fig. 5. Widths of the retouched (unshaded) and unretouched (shaded) blades from Mash Karim.

wide. However, this result could be from the presence of percussion blades, which tend to be wider than pressure blades. Considering the repeated reduction sessions, it is fairly conceivable that the same core produced blades within the size range noted here.

### *Tool Typology*

Many of the retouched tools were made on blade blanks. There is a clear size difference between retouched and unretouched blades (Fig. 5); the typical width of retouched blades is 12–13 mm and of unretouched blades, 9–10 mm, showing that wider blades were preferred as tool blanks. Tools made on other blanks include miscellaneous retouched flakes on two cortical flakes, one core edge flake, and one core tablet (Fig. 3: 6); a sidescraper on one non-cortical flake; end-scrapers on one non-cortical flake; and one cortical core edge flake (Fig. 4: 3).

The most common tools are sickle elements, constituting as much as 42.2 per cent of the total retouched tool assemblage (Table 2). Considering its small size and geographical setting, one may regard Mash Karim as a pastoral nomadic camp,<sup>10</sup> a site type thought to have increased in the Chalcolithic period in the region.<sup>11</sup> However, the abundance of sickle elements suggests that farming also comprised an important part of the community's subsistence strategies, although the final statement should await analyses of other relevant records such as botanical remains and the

<sup>10</sup> Sardari and Taheri 2015.

<sup>11</sup> Alizadeh 2009; *cf.* Potts 2014.

**Table 2. Inventory of the retouched tools from Tepe Mash Karim.**

Categories	No	%
Borer	1	1.2
Backed blade	1	1.2
Glossed blades	35	42.2
Edge-damaged blades	23	27.7
Retouched blades	9	10.8
Denticulated blades	6	7.2
Obliquely truncated blade	1	1.2
Retouched flakes	4	4.8
End scrapers on flake	2	2.4
Side scrapers	1	1.2
Total	83	100.0

use-wear of the stone artefacts. The sickle elements of Mash Karim were manufactured on either middle ( $n = 19$ ) or proximal ( $n = 16$ ) segments. No sickle element was made on a distal segment, indicating that the plunging tips, inevitably produced through pressure debitage (Fig. 3: 7–11), were removed in preparation for hafting to handles. While their average width generally corresponds to the type of blade blanks ( $x = 13.08$  mm;  $s.d. = 2.687$  mm), the lengths do not show a tightly concentrated distribution (Fig. 5). The mode is between 40 mm and 45 mm, with variation between 16 mm and 68 mm. This rather large disparity is probably partly a result of breakage during use and post-depositional processes.

Sickle elements were likely hafted to handles. The distribution pattern of gloss along the edges (Fig. 4: 8–12) indicates their hafting parallel to handles. It is quite likely that the Chalcolithic knappers segmented blades to a desired length when necessary. Interestingly, the present collection contains a short blade segment or thin section resembling the Neolithic side-blow blade-flake (Fig. 4: 5). One of the supposed functions of detaching side-blow blade-flakes is to adjust the blade length for hafting. While this technique was originally identified in the Neolithic of Upper Mesopotamia, comparable techniques are now known to have been utilised in the Chalcolithic period as well.<sup>12</sup> The thin section of the Mash Karim artefact exhibits traces of using the anvil technique, characteristic of the side-blow blade-flakes.<sup>13</sup>

Besides the sickle elements, the next most frequent retouched tools at Mash Karim are edge-damaged blades (27.7 per cent), retouched blades (10.8 per cent), and denticulated blades (7.2 per cent; Fig. 4: 7) (Table 2). The morphological traits of these three groups of blade tools closely resemble those of the sickle elements (Fig. 4: 8–12). Furthermore, the sickle elements often show

<sup>12</sup> Vardi and Gilead 2011.

<sup>13</sup> Nishiaki 1996.

retouched and/or denticulated edges (42.9 per cent; 15/35). As such, those blade tools are likely to include pieces used as sickle elements despite no visible gloss remaining. Among the other blade tools, one borer (Fig. 4: 1), one backed blade (Fig. 4: 2), and one obliquely truncated blade (Fig. 4: 4) are noted. The borer retains a pointed tip at the proximal end of the blade blank. The backed blade is a rather atypical piece made on a percussion blade. On the other hand, the obliquely truncated blade is unique in this assemblage. However, it is doubtful that the retouch resulted from post-depositional processes.

## Discussion

As noted earlier, the sixth and fifth millennia BC lithic assemblages of the Zagros region have been generally assigned to the Post-Mlefaatian industry.<sup>14</sup> The lithic material from Mash Karim, a Middle Bakun site of the fifth millennium BC, indeed exhibits techno-typological features typical of this industry. In terms of technology, it represents a blade industry characterised by pressure debitage. The predominant use of pressure debitage for blade production is one signature of the Mlefaatian/Post-Mlefaatian tradition. However, blade products became larger in the Post-Mlefaatian.<sup>15</sup> This diachronic change has been quantified by recent data from the Fars region. Both the Early and Late Mlefaatian blade assemblages from Tepe Rahmatabad show an average width of approximately 9 mm,<sup>16</sup> while the Early Post-Mlefaatian from the Late Ceramic Neolithic site of Tall-i Jari B contains blades most frequently 11–12 mm wide.<sup>17</sup> The average size of blades from Mash Karim corresponds well with this pattern as a Post-Mlefaatian industry (Fig. 5).

The typological characteristics of the Mash Karim lithics also indicate affinities with the Post-Mlefaatian. In the Post-Mlefaatian industry, the backed bladelets that were so common in the Mlefaatian<sup>18</sup> disappeared; geometrics, which flourished in the Late Mlefaatian, gradually decreased.<sup>19</sup> Instead, farming tools such as sickle elements became predominant. These signs indicate the decreasing importance of hunting and the heavier reliance on farming in the Post-Mlefaatian, which started in the early sixth millennium BC. The Mash Karim assemblage represents a late variant of the Post-Mlefaatian, in which geometrics are no longer present and the tool assemblage is dominated by sickle elements and related cutting tools.

The sickle elements from Mash Karim also follow the Post-Mlefaatian tradition. Sickle elements in Mlefaatian assemblages are known to consist of those showing gloss both parallel and oblique to the edge.<sup>20</sup> Narrower elements tend to show oblique gloss and thus oblique hafting to the handle. By contrast, such elements are absent from Mash Karim. Similarly, the Post-Mlefaatian assemblages from Tall-i Jari B<sup>21</sup> and Tall-i Gap<sup>22</sup> yielded no elements with oblique gloss.

<sup>14</sup> Kozłowski 1999, p. 76.

<sup>15</sup> Kozłowski 1999, p. 76.

<sup>16</sup> Nishiaki *et al.* 2013; Abe and Azizi Kharanaghi 2014.

<sup>17</sup> Nishiaki 2013.

<sup>18</sup> Kozłowski 1999, p. 62.

<sup>19</sup> Kozłowski 1999, p. 76.

<sup>20</sup> Nishiaki *et al.* 2013, p. 9.

<sup>21</sup> Hori 1988/89, fig. 4.

<sup>22</sup> Egami and Sono 1962, fig. 36.

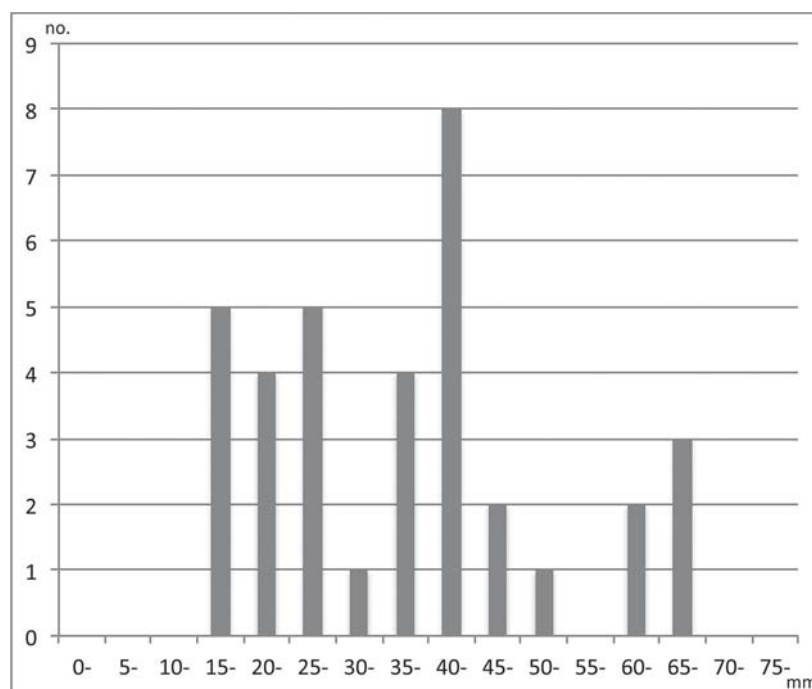


Fig. 6. Lengths of the sickle elements from Mash Karim.

Apparently, sickle elements of the Post-Mlefaatian industry were hafted in only one way—that is, parallel to the handle. Hafting slots of the sickle handles recovered thus far at Ceramic Neolithic to Chalcolithic sites on the Zagros plateau are only 8–10 cm long.<sup>23</sup> These handles contrast strikingly with those recovered at contemporaneous sites in the Mesopotamian lowlands, where sickles with cutting edges >20 cm long were utilised.<sup>24</sup> Hori infers that, considering the largest size of sickle elements (11 cm) and abundant occurrence of elements about 4 cm long, the sickles at the Post-Mlefaatian site of Tall-i Jari B were equipped with one or two blades at most.<sup>25</sup> This reconstruction seems perfectly applicable to Mash Karim, which shows an almost identical size distribution of sickle elements (Fig. 6).

Therefore, the lithic assemblage from Mash Karim can safely be assigned to the Post-Mlefaatian industry. However, this long-lasting entity, persistent in the sixth to fifth millennium BC, likely experienced diachronic changes. The gradual decrease of geometrics has already been noted as a typological change. The Mash Karim material suggests another remarkable change in typology. Its tool assemblage contains a high proportion, more than 40 per cent, of sickle elements. This proportion is significantly higher than that of the early sixth millennium BC site of Tall-i Jari B,

<sup>23</sup> Hori 1988/89, p. 27.

<sup>24</sup> For example, Nishiaki 2004.

<sup>25</sup> Hori 1988/89.

which is 21.9 per cent;<sup>26</sup> sickle elements were even rarer in the earlier periods.<sup>27</sup> The remarkably common occurrence of sickle elements in the fifth millennium BC supports the general proposition regarding the significant increase in reliance on farming in the subsistence economy of this period.

The present study revealed a technological change as well. In the Mlefaatian industry, the pressure blade cores often show a conical shape because the blade removals were usually conducted around the periphery of the single circular platform. The cores are thus described as bullet cores.<sup>28</sup> Although the original definition of the Post-Mlefaatian emphasises the continued use of 'conical cores' from the Late Mlefaatian,<sup>29</sup> those cores do not exist in the Mash Karim assemblage. The pressure blade cores of Mash Karim retain a blade removal surface on one surface alone. Accordingly, the overall shape is wedge-like rather than conical (Fig. 3: 1, 2).

This unique trait observable on the admittedly small collection from Mash Karim is also confirmed at the Middle Bakun settlement of Tall-i Gap. All of the nine cores published in the Tall-i Gap report exhibit unifacial core reduction, virtually indistinguishable from that of Mash Karim.<sup>30</sup> This method was rare in the Early Post-Mlefaatian of Tall-i Jari B. The core assemblage of Tall-i Jari B contains no 'bullet cores' in the literal sense but does include a small number of broad 'conical cores'. On the other hand, unifacial cores constitute only 6.9 per cent of the blade cores (2/29).<sup>31</sup> Therefore, we can argue that the technological change occurred after the occupation of Tall-i Jari B.

This observation raises important questions as to precisely when this unique core technology was introduced in the Zagros highlands and how it was related to the beginning of the Chalcolithic period. Previous research has suggested that interaction with the Susiana lowlands played a substantial role in these cultural changes.<sup>32</sup> In this regard, it is interesting to note that similar technological changes occurred in the Susiana lowlands as well. Useful data are available from the Khuzistan plain (Fig. 1). One example is from the stratified settlement of Tepe Djaffarabad, which demonstrates comparable changes in the core shape: blade cores from Levels 4 to 6 of the sixth millennium BC contained conical cores with pointed ends,<sup>33</sup> while those from Levels 3 to 1 of the fifth millennium BC no longer yielded such pieces and were dominated by unifacial cores with blunt ends.<sup>34</sup> Second, the combined evidence from different sites of the Neolithic and Chalcolithic periods in the Deh Luran also shows a similar trend: a remarkable technological change can be seen during the Late Ceramic Neolithic, particularly between the Sefid and Surkh phases.<sup>35</sup> The proportion of bullet cores significantly dropped and gave way to other types of pressure blade cores, from which blades were detached from only one surface or a limited part of the

<sup>26</sup> Nishiaki 2013.

<sup>27</sup> Nishiaki *et al.* 2013.

<sup>28</sup> Hole *et al.* 1969.

<sup>29</sup> Kozłowski 1999, p. 76.

<sup>30</sup> Egami and Sono 1962, p. 110.

<sup>31</sup> Nishiaki 2013.

<sup>32</sup> See Alizadeh 2009; Weeks *et al.* 2010.

<sup>33</sup> Dollfus 1975, pp. 154–155.

<sup>34</sup> Dollfus 1971, fig. 25.

<sup>35</sup> Hole *et al.* 1969; Hole 1977.

core.<sup>36</sup> The decrease of bullet cores continued, and they almost disappeared after the Sabz phase of the sixth millennium BC: the Bayat phase, contemporaneous with the Early Bakun, yielded no such cores.<sup>37</sup>

It seems likely that unifacial blade core reduction is characteristic of the fifth millennium BC of southwest Iran, representing the Late Post-Mlefaatian industry of the region. Considering the rarity of unifacial blade cores in the Early Post-Mlefaatian assemblage from Tall-i Jari B, the major shift likely occurred during the subsequent Shamsabad or the Early Bakun periods. This shift should not be regarded as a mere change in core shapes. Rather, it must have reflected a change in the way of preparing cores for pressure flaking or an adjustment in holding the devices.<sup>38</sup> The currently available evidence suggests that this technological change occurred rather widely—across the Susiana lowlands and the highland plateaus of the Zagros region—cross-cutting cultural provinces (Khuzistan and Fars), as shown through ceramic analysis. These findings, which require further testing with more rigorous chronological data, support the current hypothesis that interaction with the Susiana lowlands played a substantial role in the cultural transformation of the early fifth millennium BC of the Fars Province.

## Conclusion

This paper presented results of an analysis of the Middle Bakun lithic assemblage from Mash Karim. The techno-typological features revealed in the analysis demonstrate that this assemblage belongs to the Post-Mlefaatian industry that is widely known in the Zagros region. In addition, this study pointed out the existence of diachronic technological variability within this industry, particularly in core reduction methods: the preferential use of conical cores for pressure blade production in the Early Post-Mlefaatian was replaced by the predominant use of unifacial cores in the Late Post-Mlefaatian, to which the Mash Karim assemblage belongs. This study suggests that the shift occurred after the Late Ceramic Neolithic or at the beginning of the Early Chalcolithic on both the plateau of the southwest Zagros and on the lowland plains.

The emergence of the Bakun culture signifies the onset of an important cultural transformation during the Early Chalcolithic in southwest Iran. Flaked stone assemblages from the sixth and fifth millennia BC in the Zagros region, including the Bakun, have been collectively assigned to a single industry, called the Post-Mlefaatian. However, its potential chronological and regional variability remains insufficiently investigated. The study presented here is an attempt to reveal such variability, suggesting that the Post-Mlefaatian industry could be divided into diachronic stages in this region. Identification of the detailed time–space contexts for these changes could potentially produce new insights into the important socioeconomic developments occurring at the interface period of the Late Neolithic/Early Chalcolithic, which have been discussed in the current literature from ceramic perspectives alone.<sup>39</sup> To further develop this research, it is necessary

<sup>36</sup> Semi-chipped blade cores in Hole *et al.* 1969, pp. 93–94; blade cores a–c in Hole 1977, pp. 184–186.

<sup>37</sup> Hole *et al.* 1969, p. 104; Hole 1977, p. 186.

<sup>38</sup> See Wilke 1996.

<sup>39</sup> For example, Alizadeh 2006, p. 11; Weeks *et al.* 2010, p. 265.



to build a database of relevant lithic assemblages. It is hoped that this paper has provided the first step on this path.

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# Beyond the Mounds: Insights into a Late Sixth Millennium BCE Sherd Scatter Site in the Shahrour Plain, Northeast Iran

Kourosh ROUSTAEI

## Abstract

*This article deals with the results of an excavation at a sherd scatter site of the Cheshmeh Ali culture, Ghaf Khāneh, in the Shahrour Plain, northeast Iran. The site was sounded in five trenches in 2006 and yielded a rather large collection of stratified ceramics. Two  $^{14}\text{C}$  dates suggest that the site was occupied in the late sixth millennium BCE. Based on the thin archaeological deposits and almost identical time range of the two absolute dates, it is proposed that the site was in use for a short period of time. Furthermore, the evidence suggests that Ghaf Khāneh cannot be considered an ordinary village site, but instead was a site with a specific function, such as a ceramic manufacturing workshop. The site also provides evidence of an unprecedented early occurrence of the Grey Ware which was destined to be the hallmark of the Bronze Age cultures of the region in the fourth to second millennia BCE.\**

## Introduction

The last centuries of the sixth millennium BCE witnessed a turning point in the archaeological record of the Central Plateau and the northeastern region of Iran.<sup>1</sup> The appearance of a distinct black-on-red painted ceramic assemblage has been considered the hallmark of this cultural change. The new culture, known as Cheshmeh Ali,<sup>2</sup> completely replaced the earlier, local Neolithic cultures of the region. Although our current knowledge about the social and political

\* I would like to thank the Ghaf Khāneh excavation team members who participated in various stages of the field-work: Majid Kouhi Gilavan, Ali Sharifi and Keivan Amiri. I would also like to express my gratitude to two anonymous reviewers for their useful comments. The project was funded by Iranian Center for Archaeological Research.

<sup>1</sup> By the term 'Central Plateau' we refer to a region south of the Alborz and east of the Zagros Mountains, encompassing a roughly triangular piece of terrain, with Qazvin Plain on the west, Semnan Plain on the east and the Kashan/Natanz Plains to the south (for a detailed discussion of the name and extent of the Central Plateau, see Roustaei 2011–2012). Our delimitation of the region closely follows that proposed by Y. Majidzadeh (1976), who defined and characterised the region for the first time. In some literature, the region is called 'Central Northern Iran' (for example, Voigt and Dyson 1992, p. 164).

<sup>2</sup> The period under consideration in this paper was first identified and briefly characterised during Erich Schmidt's excavations at Tappeh Cheshmeh Ali in Ray, a major suburb in the south of Tehran (Schmidt 1935, 1936). The same materials were uncovered by R. Ghirshman at the north mound of Tappeh Sialk in Kashan Plain in the 1930s (Ghirshman 1938), where he dubbed it the "Sialk II" period, underlying the earlier Sialk I deposits. Later, in the 1970s, Y. Majidzadeh, a prominent Iranian archaeologist working on the prehistory of the Central Plateau, proposed "Early Plateau B" for this

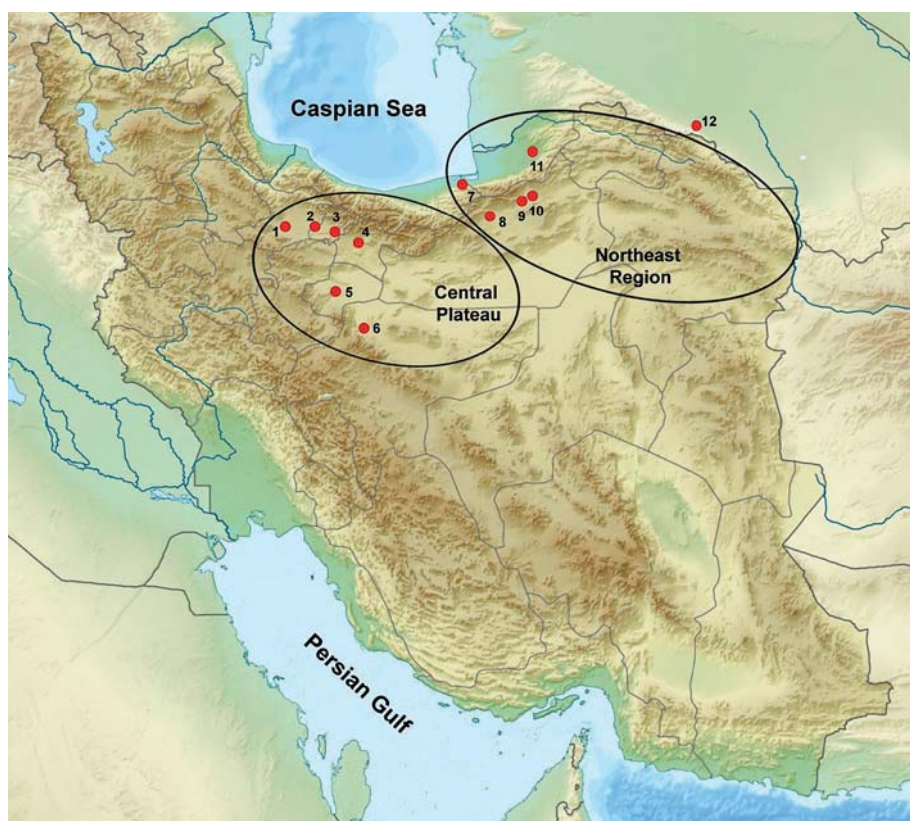


Figure 1. Approximate extent of the Central Plateau and northeastern regions in Iran. 1. Zagheh; 2. Jeyran Tappeh; 3. Moushelan Tappeh; 4. Tappeh Cheshmeh Ali; 5. Qomroud; 6. Sialk; 7. Huto and Kamarband caves; 8. Shir Ashian; 9. Ghaf Khāneh; 10. Siah Tappeh; 11. Aq Tappeh; 12. Anau North (Map adapted from commons.wikimedia.org/wiki/File:Iran\_relief\_location\_light\_map.jpg).

infrastructures of the Cheshmeh Ali culture — that is, its impetus for expansion — is meagre, it spread across a vast terrain, from the Central Plateau to the northeastern region. In its final stages, Cheshmeh Ali culture reached as far as the northern piedmont of Kopet Dagħ as the earliest material from Anau suggests.<sup>3</sup> Such cultural uniformity did not exist during the earlier Neolithic or later Bronze Age of the region. Yet the crucial question of Cheshmeh Ali culture's origins remains open. The striking uniformity apparent in its ceramic assemblages and the vast extent of its terrain was not seen again in the cultural development of prehistoric northern Iran. It encompassed great tracts of land, both south and north of the Alborz Mountains. In terms of proposed prehistoric cultural regions of Iran,<sup>4</sup> Cheshmeh Ali culture occupied the whole of

period (Majidzadeh 1981). In the last two decades another term, with no elaboration on its *raison d'être*, has been coined for the period, 'Transitional Chalcolithic' (Fazeli Nashli 2001, pp. 39–43).

<sup>3</sup> See Dyson and Thornton 2009, pp. 19–20.

<sup>4</sup> Voigt and Dyson 1992.

the Central Plateau and the western portion of the northeastern region, including the Gorgan Plain, southeast of the Caspian Sea (Fig. 1). Its extent measured some 700 × 400 km.

Temporally, Cheshmeh Ali culture emerged in the last centuries of the sixth millennium BCE (c. 5300/5200 BCE) and faded out around 4400/4300 BCE.<sup>5</sup> This time range is proposed almost solely on the basis of absolute dates available from several sites that were excavated in the Central Plateau during the past two decades.<sup>6</sup> Cheshmeh Ali culture was preceded by the Sialk I culture in the Central Plateau and the Chakhmaq culture in the northeastern region.<sup>7</sup> These two cultures, essentially spanning the sixth millennium BCE, differed substantially in almost every aspect.

Large excavations at several mounded sites of this period on the Central Plateau (Fig. 1), such as Cheshmeh Ali, Sialk, Jeyran Tappeh, Moushelan Tappeh (Esmail Abad), Pardis and Qareh Tappeh Qomroud,<sup>8</sup> revealed a huge corpus of cultural material, mainly ceramics, allowing researchers to partially characterise the physical manifestation of this extensive prehistoric culture. Information obtained for the northeastern region, however, has been minimal, with data obtained only from soundings at a few sites.<sup>9</sup> This article is intended to address this gap in the record by interpreting the results of an excavation at a sherd scatter site, Ghaf Khāneh, in the Shahroud Plain, northeast Iran.

### The northeastern region and Cheshmeh Ali culture

The northeastern region of the Iranian Plateau stretches from Damghan Plain in the west to the Iran-Afghanistan border in the east, and from the northern edge of Dasht-e Kavir in the south to the Iran-Turkmenistan border in the north (Fig. 1).<sup>10</sup> Juxtaposition of some major geographical features, like the Alborz and Kopet Dag mountain ranges and the Great Dasht-e Kavir and Karakum deserts, means that the region incorporates various landscapes, with striking environmental differences. These landscapes fall into three major categories: foothill plains; mountains and intermontane plains; and alluvial plains.<sup>11</sup> Mountains and intermontane plains comprise major parts of the region, the Gorgan Plain, southeast of the Caspian Sea, is its major alluvial plain, while almost the whole southern extent of the region is occupied by semi-arid foothill plains, facing the desert landscape to the south.

General aspects of the prehistoric sequence of northeastern Iran were first established through E. Schmidt's large-scale excavations at Tappeh Hesar, a major Bronze Age settlement near Damghan, in the 1930s.<sup>12</sup> Using a ceramic typology based on vessels recovered from hundreds of graves, Schmidt divided the excavated sequence into three main periods: I, II and III bottom-to-top.

<sup>5</sup> See Dyson and Thornton 2009, p. 19.

<sup>6</sup> For example, Fazeli *et al.* 2004, pp. 18–20; Fazeli *et al.* 2005; Pollard *et al.* 2013.

<sup>7</sup> See Roustaei 2014, 2016a.

<sup>8</sup> For example, Schmidt 1935, 1936, Fazeli *et al.* 2004 (Cheshmeh Ali); Ghirshman 1938 (Sialk); Madjidzadeh 2010 (Jeyran Tappeh); Talaii 1983, 2000 (Moushelan Tappeh [Esmail Abad]); Fazeli *et al.* 2007 (Pardis); Kaboli 2015 (Qareh Tappeh Qomroud).

<sup>9</sup> For example, Rezvani 1990; Malek Shahmirzadi and Nokandeh 2000.

<sup>10</sup> For an overview of the extent, geography and landscape of the northeast region, see Roustaei 2014, 2016a.

<sup>11</sup> Roustaei 2016a.

<sup>12</sup> Schmidt 1937.



Nevertheless, it was the *Restudy Project*, directed by R. Dyson and M. Tosi, in the 1970s that significantly enhanced our understanding of various aspects of the Hesar culture,<sup>13</sup> especially its significant role as a major manufacturing centre and its part in the third–second millennium metallurgy of the eastern and northeastern Iranian Plateau.<sup>14</sup> The *Restudy Project* established an absolute dating framework for most of the Hesar sequence, spanning more than two millennia from c. 4300/4200–1800 BCE.<sup>15</sup>

The earlier part of the prehistoric sequence of the northeastern region was first roughly established by the Japanese excavations at Sang-e Chakhmaq, near Shahroud, in the 1970s.<sup>16</sup> During the last decade, however, thanks to a number of targeted Neolithic field projects, our understanding of the Neolithic of the region has been significantly enhanced.<sup>17</sup> Sang-e Chakhmaq is the type-site of the Neolithic in the northeastern region, and it consists of two mounds: West Mound and East Mound. The West Mound represents a partially aceramic settlement dated to c. 7100–6700 BC, while the East Mound contains a ceramic Neolithic sequence dated to c. 6200–5300 BC.<sup>18</sup> Overall, the pottery assemblage of the East Mound, especially its lower levels, the lithic collection, and certain items among the small finds are closely comparable to those of the Jeitun culture of southern Turkmenistan.<sup>19</sup> Further information on the Neolithic of the northeastern region has come from a number of excavations, both stratigraphic<sup>20</sup> and large exposure.<sup>21</sup> The least known period of the northeastern region is Cheshmeh Ali, which falls between the Chakhmaq Neolithic period (c. 7100–5300 BCE) and the Hesar period (c. 4300/4200–1800 BCE); that is, the period from c. 5300/5200–c. 4400/4300 BCE.

In the northeastern region, Cheshmeh Ali period sites have been identified only in the west; that is, in the Gorgan Plain, north of the Alborz Mountains, and the southern foothill plains of the eastern Alborz range (Fig. 1). To date, no certain evidence of the culture has been reported from the eastern half of the region. The sites in the Gorgan Plain significantly outnumber those in the southern foothill plains.<sup>22</sup> None of the Gorgan Plain excavations has had the Cheshmeh Ali culture as its specific focus, but material of the period has sometimes been reported; for example, at Aq Tappeh, a multi-period mounded site in the eastern part of the plain.<sup>23</sup>

Up until now, 13 sites of the Cheshmeh Ali period have been identified in the Shahroud area, on the southern foothill plain of the eastern Alborz (Fig. 2).<sup>24</sup> These sites can be divided into

<sup>13</sup> Howard and Dyson 1989.

<sup>14</sup> Pigott 1989; Thornton 2009.

<sup>15</sup> Dyson and Lawn 1989; see also Thornton 2009, Table 3.2.

<sup>16</sup> For example, Masuda *et al.* 2013.

<sup>17</sup> For example, Roustaei *et al.* 2015; Roustaei 2016a.

<sup>18</sup> Nakamura 2014; Roustaei *et al.* 2015.

<sup>19</sup> Roustaei 2014, pp. 375–380.

<sup>20</sup> For example, Garazhian *et al.* 2014; Abbāsi *et al.* 2016; Roustaei 2016b.

<sup>21</sup> Rezvani and Roustaei 2016.

<sup>22</sup> The exact number of Cheshmeh Ali sites in the Gorgan Plain is still unknown. In a list and a map published recently (Abbāsi 2011, p. 222, map 6), the sites of this period and the succeeding period add up to 73 altogether. Nevertheless, the present author has visited at least 50 sites with certain Cheshmeh Ali ceramics in the Gorgan Plain and its adjacent valleys.

<sup>23</sup> Malek Shahmirzadi and Nokandeh 2000.

<sup>24</sup> Rezvani 1999; Roustaei 2012. Already 12 sites of this period had been identified and partially reported in the Shahroud area (Roustaei 2012). The 13th site was discovered accidentally in 2015, having material from the preceding Chakhmaq Period as well.

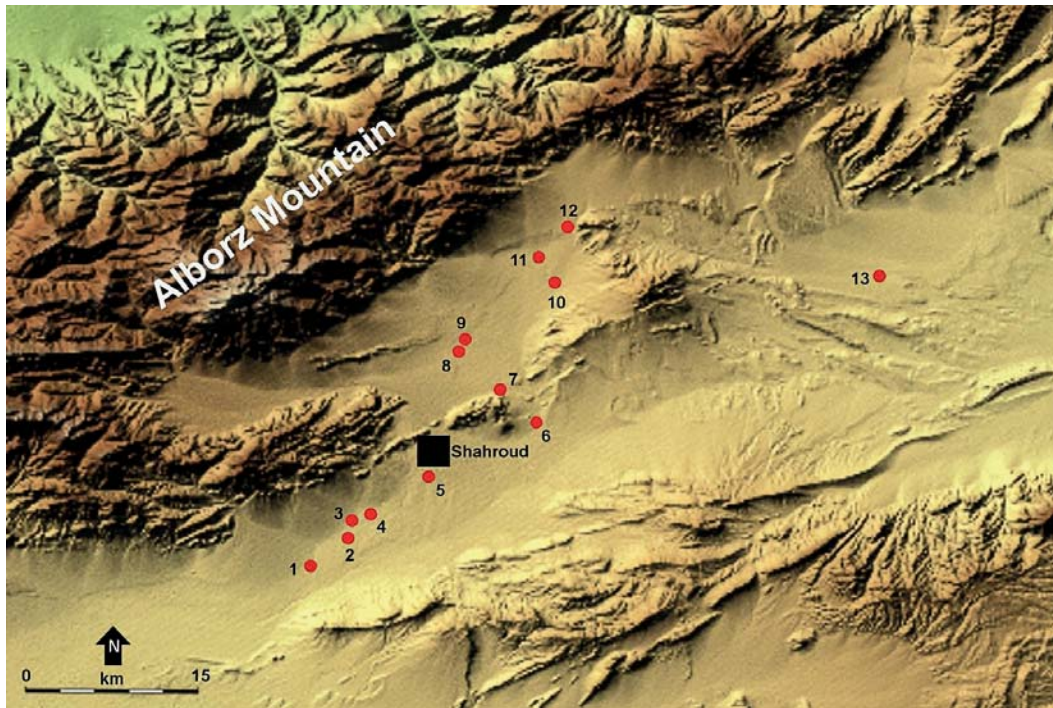


Figure 2. Distribution of the Cheshmeh Ali Period sites in the Shahroud area. 1. Kalāteh Khān; 2. Khourian I; 3. Ghaf Khāneh; 4. Siah Tappeh; 5. A newly discovered, as yet unnamed, site; 6. Kheir Abad I; 7. Tal-e Khakestar; 8. Sang-e Chakhmaq east mound; 9. Deh Kheir; 10. Char Tagh Pro; 11. Siah Rigi; 12. Zarin Kamar I; 13. Qaleh Tappeh (© M. Zeidi, with some modifications).



Figure 3. Satellite image of Ghaf Khāneh, Siah Tappeh and Khourian I in the Shahroud Plain (Google Earth).

three distinct groups: 1) mounded sites (multi-period or single period), 2) single-period sherd scatter sites, and 3) surface scatters of Cheshmeh Ali ceramics at earlier Neolithic sites. Three sites—Siah Tappeh, Khourian I and Chartagh Pro—are mounded sites (Figs 2, 3).<sup>25</sup> Measuring about 4.5 ha, Siah Tappeh is the largest known site of this period in the Shahroud area. The site represents a single-period settlement located at the end of a tongue of a large alluvial fan. Khourian I, a multi-period low mound located in the Shahroud Plain, was excavated by H. Rezvani in 1990 and proved to be a settlement site with at least 2 m of archaeological deposit partly buried under the present surface of the plain.<sup>26</sup> Chartagh Pro is a 13 m-high, multi-period site with materials of the Cheshmeh Ali, Bronze Age, Iron Age, Seljuk, Ilkhanid and Teimurid periods. As such, it is the site with the longest cultural sequence identified in the Shahroud area. Like Siah Tappeh and Khourian I, Chartagh Pro is located in the plain.

Ghaf Khāneh, which will be discussed in detail below, Tal-e Khakestar and Zarin Kamar I are single-period sherd scatters with almost no recognisable elevation above the surrounding ground, probably indicating transitory occupation. Zarin Kamar I may have been a workshop for chipped stone artefacts, as evidenced by very high numbers of surface lithics and the nearby presence of siliceous rock outcrops.<sup>27</sup> That Tal-e Khakestar was a site of transitory occupation is further indicated by its unusual natural setting and the scarcity of surface finds.<sup>28</sup> Tal-e Khakestar and Zarin Kamar I are located on gravelly terrain at the foot of rocky hills on the margins of the Bastam Plain, north of Shahroud (Fig. 2).

The third group, includes seven sites. They are scatters of Cheshmeh Ali ceramic sherds recorded at Neolithic settlements. Excavations at Sang-e Chakhmaq East Mound,<sup>29</sup> Deh Kheir<sup>30</sup> and Kalāteh Khān<sup>31</sup> suggest, however, that the sherds are not associated with settlement deposits.

### Ghaf Khāneh and its surrounding landscape

Ghaf Khāneh is located about 8 km southwest of the town of Shahroud, some 320 km east-northeast of Tehran. Shahroud Plain is a longitudinal, northeast–southwest foothill plain, sandwiched between the Alborz Mountains to the north and the low, mainly marly hills to the south (Fig. 2). The length of the plain is about 30 km, while its width varies from 10 km in its north-east corner to just 2 km at the southwest end, where it joins the Damghan Plain to the west. The outstanding geomorphologic feature of the plain is a series of continuous, overlapping alluvial fans (*bajada*) which define the northern limit of the plain (Figs 2, 3). The southern limit of the

<sup>25</sup> Roustaei 2012.

<sup>26</sup> Rezvani 1990, 2001.

<sup>27</sup> Roustaei 2012, p. 201, fig. 18.

<sup>28</sup> Roustaei 2012, p. 201.

<sup>29</sup> Roustaei 2014; Roustaei *et al.* 2015. Masuda, the first excavator of Sang-e Chakhmaq, has claimed that the upper two levels of the East Mound (layers 1 and 2) contain ceramic assemblages similar to those of the Cheshmeh Ali culture sites (also known as Sialk II) in the Central Plateau (see, for example, Masuda 1984, p. 210; Masuda *et al.* 2013, p. 228). Not only has this claim been posited without any supporting evidence, but the author's excavation of the uppermost layers of the site in 2009 revealed not a single piece of the known Cheshmeh Ali ceramics, a pattern also observed in Deh Kheir and Kalāteh Khān. Elsewhere, we discussed this issue in some detail (Roustaei 2014, pp. 357–359).

<sup>30</sup> Rezvani and Roustaei 2016, p. 21.

<sup>31</sup> Roustaei 2016b, p. 64.



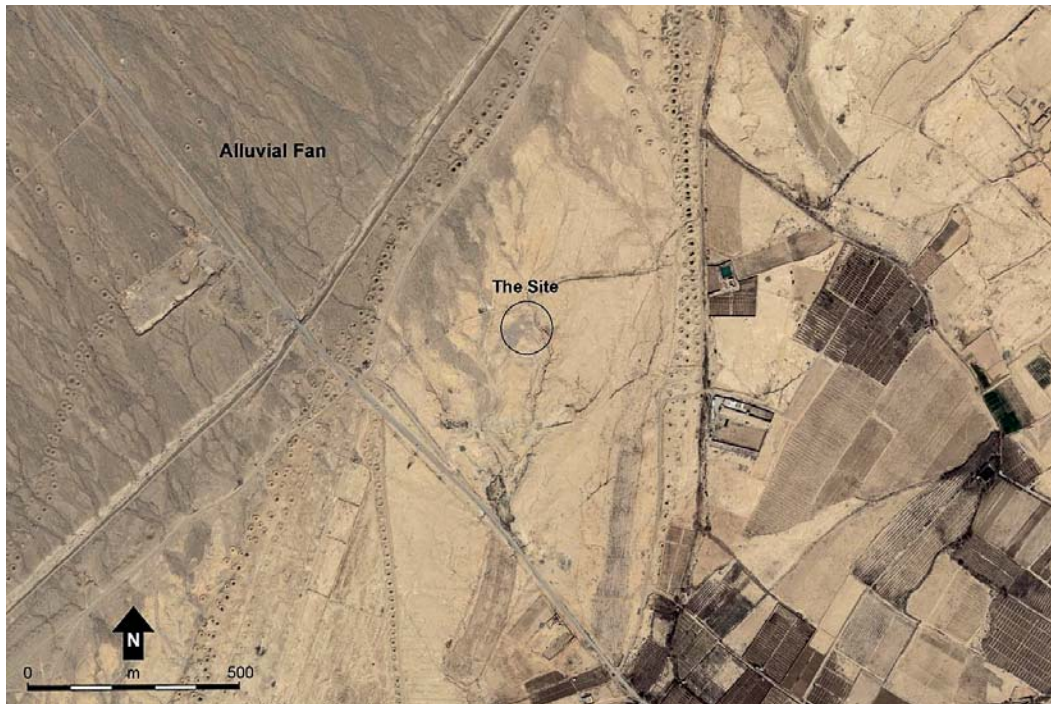


Figure 4. Closer satellite image of Ghaf Khāneh in its environmental context. Note the location of the site on the distal end of alluvial fans (Google Earth).

Shahroud Plain is characterised by a longitudinal terrain of badlands that developed from the higher evaporate formations further south.

Ghaf Khāneh is located at the distal end of an extensive alluvial fan stretching down for nearly 6 km from the northern elevation of the Shahroud plain (Figs 2, 4). The site is a sherd scatter, with almost no perceivable height above its surroundings, sitting at 1223 m above sea level and covering an almost circular area, with a diameter of *c.* 120 m; the total area is, therefore, slightly more than 1 ha (Fig. 5). The site is clearly distinguished by a dense concentration of pebble- and cobble-sized gravels, which cover its surface but are absent from its immediate surroundings (Figs 6, 8). The surface is densely littered with ceramic fragments of the distinct black-on-red, classic Cheshmeh Ali type. Our observations suggested a surface density of 20–30 sherds per square metre in most parts of the site. In addition to sherds, there could be seen on the surface a large number of chipped stone artefacts, mainly bladelets and flakes, and a handful of large, deeply patinated stone flakes of probably much earlier date (see below).

The immediate surroundings of the site consist of undulating ground dissected by numerous shallow seasonal water courses, originating from the northern alluvial fans (Figs 3, 4, 6). No arable land is apparent in the immediate vicinity of the site, but it does exist 1–2 km further south, on flat parts of the plain (Fig. 3). Today, crop agriculture in the plain is irrigated by water extracted from numerous wells dug into deep aquifers. Due to insufficient rainfall—less than 250 mm per

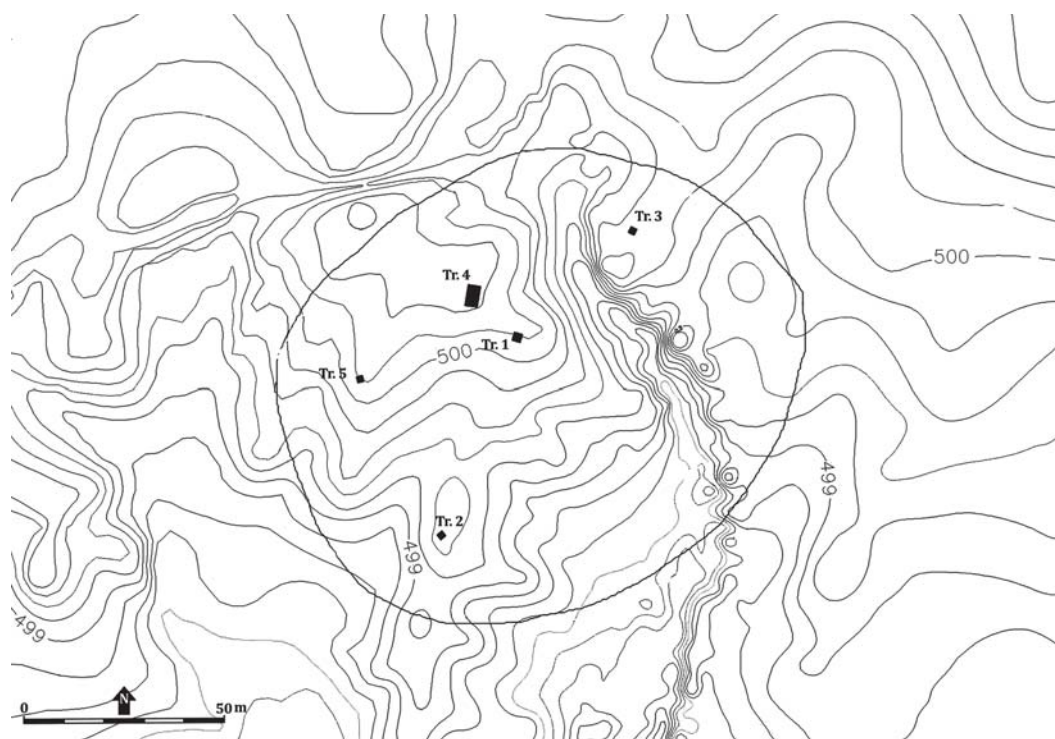


Figure 5. Topographic map of Ghaf Khāneh and locations of the excavated trenches.



Figure 6. Close view of Ghaf Khāneh. The light colour, characterising the site extent, is due to the dense concentration of surface gravel. Alborz Mountain is seen in the background (Feb. 2005) (© K. Roustaei).

annum—dry farming is very risky and rarely practised by locals. Until a few decades ago, agriculture was only feasible using water from the *qanat* system that extended over the landscape, a pattern observed in almost all foothill plains between Tehran and Mashhad.<sup>32</sup>

### Objectives and approaches

Ghaf Khāneh was discovered during a pedestrian surface survey in the Shahroud Plain in February 2005,<sup>33</sup> and was excavated during a short season, of two weeks, in March 2006. Our foremost objective in excavating the site was to obtain insights into its function. The morphology of the site implied that it was a short-lived occupation with little possibility of substantial settlement debris. The dense sherd scatters visible on the surface made it unlikely that this location represented the remains of any sort of nomadic settlement, where we would usually expect to find only few degraded sherds and possibly some lithics.<sup>34</sup> Ghaf Khāneh's lack of elevation above the ground also implied the absence of substantial archaeological deposits; this impression was verified by the excavations.

Initially, we thought that Ghaf Khāneh may have had some relationship with the largest known site of the Cheshmeh Ali period in the Shahroud area, Siah Tappeh (Fig. 3). Both sites were apparently single period and contemporaneous, and they were situated little more than 2 km apart. Siah Tappeh was evidently an ordinary village settlement, as its height (c. 2 m) and our examination of the section in a 2 m-deep illegal pit implied. As such, it seemed reasonable to envisage Ghaf Khāneh as a 'satellite site' of Siah Tappeh.

Putting Ghaf Khāneh and its finds into an absolute chronological framework by running a number of <sup>14</sup>C analyses was our next objective. Assuming the site was a single-period settlement with a large corpus of pottery, as suggested by the dense surface ceramic finds, we could establish a framework of absolute dates for the site's ceramic collection, which could then be used as indicator of the temporal extent of Cheshmeh Ali culture, especially in the northeastern region of the Iranian Plateau. Formerly, there had been no absolute dates for Cheshmeh Ali materials discovered east of Tehran.

By excavating Ghaf Khāneh, we also intended to gain some insight into the alluviation dynamics of the Shahroud Plain in the first half of the Holocene. Typical examples of site burial by later alluviation had already been attested in the Central Plateau, at the sites of Sialk in the Kashan Plain and Zagheh in the Qazvin Plain.<sup>35</sup>

The excavation methodology employed a locus system, in which each discrete deposit, discernible from its surroundings was allocated a unique number. Ceramic sherds were registered using a four-digit number corresponding to the trench wherein they were recovered; thus ceramics registered from Trench 1 started with 1000, from Trench 2, 2000, and so on.

<sup>32</sup> Roustaei 2014.

<sup>33</sup> Roustaei 2006; 2012, p. 201.

<sup>34</sup> See Cribb 1991, pp. 75–79; Roustaei 2016c, p. 35.

<sup>35</sup> Ghirshman 1938, plate xxxv (Sialk); Malek Shahmirzadi 1977, p. 66 (Zagheh).



### The excavation

With the above objectives in mind, five trenches were opened in different parts of the site (Fig. 5, Table 1). Trench 1 (2 × 2 m) was opened near the centre of the site, as indicated by the site's apparent extent and the slightly raised topography at this point. The excavated sequence at this trench, 70 cm in thickness, was divided into eight loci (from 100 to 107) of which 100–104 represent the cultural deposit, while 105–107 were virgin soil (Fig. 7). No trace of architecture or other features was encountered, but a thin lens of reddened clay, probably ochre, measuring 30 cm in length and 3 cm in thickness, was partially observed in locus 104. The texture of the cultural deposit was crumbly, with high clay and silt content.

Table 1. General specifications of the Ghaf Khāneh trenches.

Trench No.	Size (m)	Thickness of cultural deposit (cm)	No. of sherds	No. of sherds/m <sup>3</sup>
1	2 × 2	70	1037	370
2	1.5 × 1.5	30	58	86
3	1.5 × 1.5	40	186	206
4	3 × 5	55	2242	271
5	1.5 × 1.5	35	214	271

As Trench 1 failed to provide clear evidence pertaining to the function and nature of the site, Trench 2 (1.5 × 1.5 m) was opened some 50 m further south (Fig. 5). The results were less informative than those of Trench 1. Virgin soil was struck 30 cm below the surface and there were

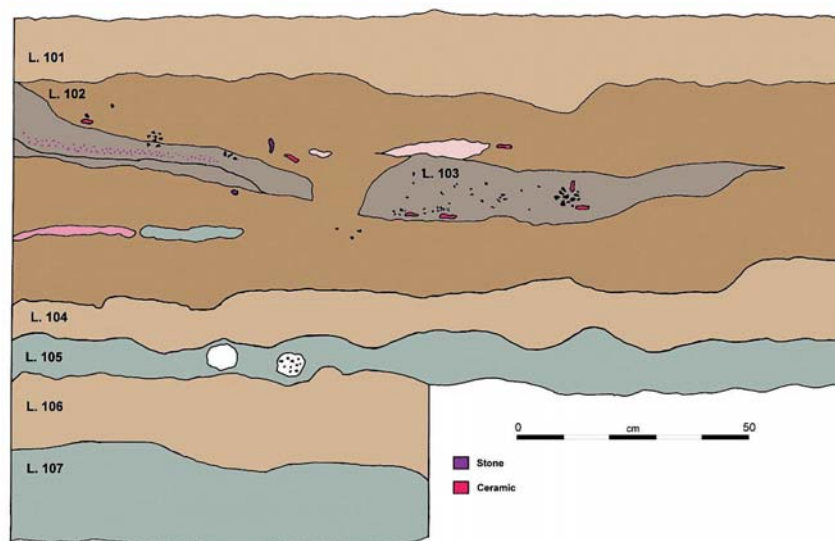


Figure 7. The south section of Trench 1 (Drawing: A. Sharifi).



Figure 8. Trench 4 at the start of excavation. Note locus 404 in the centre of the trench.

no traces of any architecture or feature. The excavated sequence was divided into six loci (200–205), of which only the two uppermost (200 and 201) were cultural.

Trench 3 (1.5 × 1.5 m) was opened in the northern part of the site, where surface deposits were partly removed by bulldozer (Fig. 5). This trench proved that the cultural deposits were no thicker than 40 cm. Here, too, no trace of any architecture or feature was encountered. The excavated sequence was divided into 11 loci, of which loci 300–304 represented the cultural deposit, while 305–310 were virgin soil.

The weak results we got from the three trenches led us to open another trench on the slightly raised part of the site. Trench 4, originally 3 × 3 m, was opened some 15 m to the northwest of Trench 1 (Fig. 5). After scraping away the surface and exposing a rather large patch of reddened, gravel-rich deposit, the trench was enlarged to a 3 × 5 m rectangle (Figs 8, 9). Excavation at Trench 4 continued to a depth of 60 cm; virgin soil was reached 55 cm below the surface (Figs 10, 11). The excavated sequence was divided into 12 loci, from 400 to 411. The only recognisable feature encountered was locus 404 at the centre of the trench. The feature was roughly oval in plan, with a diameter of 90–110 cm and a thickness of c. 25 cm (Fig. 9). Its main aspect was a large number of angular gravel pieces, comprising its main bulk, in association with reddened soil and some ash. The number of sherds associated with this feature was the fewest among the excavated loci of the trench.

Finally, to test the western part of the site, Trench 5 (1.5 × 1.5 m) was opened some 25 m to the southwest of Trench 4 (Fig. 5). In this trench, virgin soil was reached at a depth of 35 cm,

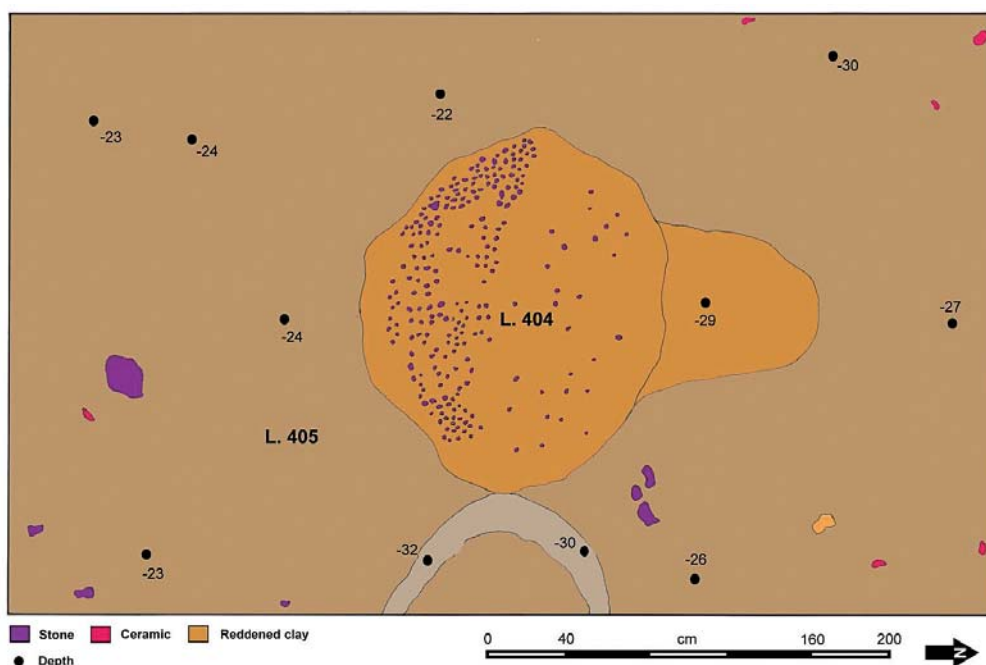


Figure 9. Plan of locus 404, Trench 4 (Drawing: A. Sharifi).

and the excavated sequence was divided into five loci (500–504) (Fig. 12). Of these, locus 503 might be the remains of a hearth, as indicated by rather high ash content. Three small fragments of a copper pin were associated with this feature (see below).

### Ceramics

The ceramic collection of the Ghaf Khāneh excavation comprises 3737 pieces (Table 2). No complete vessel or large piece representing a complete profile was found. More than 70 per cent of the collection is made up of small fragments, less than  $4 \times 4$  cm in size. The high percentage of small sherds could be attributed to the fineness and thinness of the vessels leading to breakage and fragmentation. Pottery fragments smaller than  $1 \times 1$  cm were discarded after counting. Based on the paste, surface treatment and body thickness of the recovered sherds, the whole assemblage might be considered 'fine ware'. On the basis of paste and surface colour, the collection can be classified into three groups: Red Ware, Grey Ware and Buff Ware (Fig. 13).

#### *Red Ware*

At 93 per cent, this ware comprises the overwhelming majority of the collection (Table 2; Figs 14–18). It includes both plain and painted versions. The paste colour of the ware is red, with

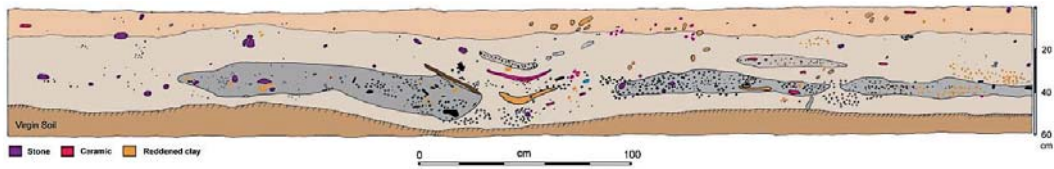


Figure 10. The east section of Trench 4 (Drawing: K. Roustaei).

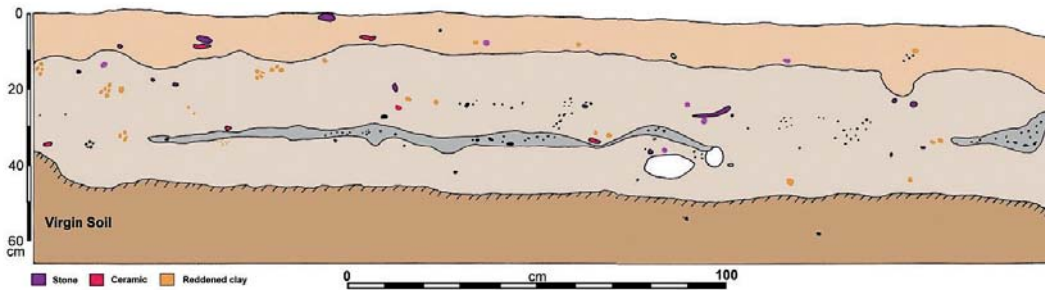


Figure 11. The north section of Trench 4 (Drawing: A. Sharifi).

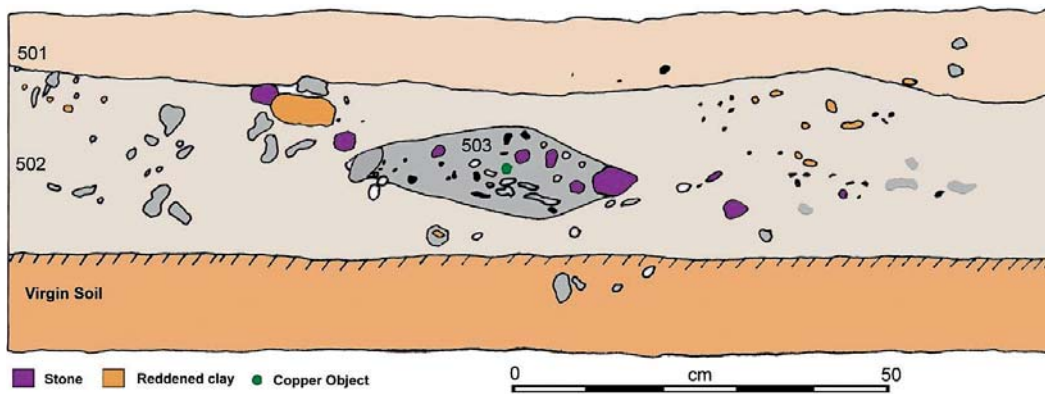


Figure 12. The east section of Trench 5 (Drawing: K. Roustaei).

Table 2. The frequencies of different ceramic groups in excavated trenches.

Ceramic group	Trench 1	Trench 2	Trench 3	Trench 4	Trench 5	Total
Red Ware (plain and painted)	854	50	160	1943	71	3078
Grey Ware	34	—	16	120	1	171
Buff Ware (plain and painted)	—	—	3	4	23	30
Discarded	149	8	7	175	119	458
Total	1037	58	186	2242	214	3737





Figure 13. A selection of various types of ceramics from the excavated trenches and surface collection of Ghaf Khāneh. (Not to scale) (© K. Roustaei)

some variation in hue; 5YR 6/6 (reddish yellow) on the Munsell Colour Chart is the most common hue. With a few thicker exceptions, the paste is dense and compact. Most ceramics in this group have a grey/black core to a various degree, an attribute that has been considered one of the most common characteristics of Cheshmeh Ali ceramics.<sup>36</sup> No inclusions are seen in the paste, except for occasional tiny pieces of shiny mica, which may be part of the original clay. The temper was chopped vegetal material as far as the thicker specimens are concerned; in most of the fine, thin sherds, no temper is visible to the naked eye. No particles were observed that are larger than clay, meaning that there is no sand in the paste. More than c. 50 per cent of the recovered sherds are less than 5 mm in thickness. In fact, specimens in the collection that are thicker than 10 mm are rare. The combination of these two attributes—that is, the fineness of the paste and the thinness of the vessel body—is the basis for here considering the Ghaf Khāneh ceramic collection to be ‘fine ware’.

The surfaces of most sherds show various degrees of burnishing. In the case of thicker-bodied vessels, however, burnishing was applied very faintly. Across all the sherds, the outer surface was often better burnished than the inner surface. Traces of burnishing are seen in horizontal and/or oblique, parallel, thin bands (2–3 mm in width), while in most cases tiny, hair-sized, matte spaces are left unburnished in between. Red Ware always bears a clay slip of the same colour as the paste; the colour ranges from 2.5YR 5/6 (red) to 2.5YR 5/8 (red) and 5YR 5/4 (reddish brown).

More than approximately one third of the recovered ceramics are painted (Figs 14–18). In general, the paint colour ranges from dark brown to almost black: 2.5YR 4/1 (dark reddish grey), 7.5YR 4/6 (strong brown), 10R 3/1 (dark reddish grey), and 10R 4/1 (dark reddish grey). Except for a few specimens, the painted designs are always rendered on the outer surface of the vessel. In more than 70 per cent of the painted rim sherds, there are two solid, horizontal, thick, painted bands on the uppermost part of the rim, a feature that can be considered a characteristic motif for the site collection. Save for a few stylised zoomorphic designs, the motifs are predominantly geometric. The most frequent are a series of horizontal or vertical solid circles; parallel horizontal or vertical lines with repeated semi-circles on one or both sides; pendant and hatched triangles; closely packed thick horizontal or vertical bands; and an arabesque-shaped design (Figs 14–18).

There are a number of zoomorphic designs in the Ghaf Khāneh ceramic collection. These are stylised representations of goats (two cases) and an animal which could be a dog (17 cases). The best example of the goat design is seen on a sherd from the surface of the site (Fig. 17: S81). Very similar goat designs have been found at the type site, Cheshmeh Ali, near Tehran.<sup>37</sup> While the goat design is nicely rendered, due to the body curvature the artist applied, the dog design is formed by only a few intersecting horizontal and vertical lines (for example, Figs 13: 9; 14: 4224); the latter is always seen on pots and bowls, facing to the right. Amongst the numerous painted designs of the Cheshmeh Ali ceramics, this one has the most extensive distribution across both the Central Plateau and the northeastern region; exact parallels to the Ghaf Khāneh ceramics have been found in the Cheshmeh Ali-period levels at Zagheh and Sialk North Mound in the Central Plateau, and at Turang Tappeh, Aq Tappeh and Sang-e Chakhmaq East Mound,<sup>38</sup> among others,

<sup>36</sup> See Dyson 1991, p. 266.

<sup>37</sup> For example, Alimohammad Esfandiari 1999, p. 88, nos. 47–49.

<sup>38</sup> Malek Shahmirzadi 1977, plate V:28 (Zagheh); for example, Ghirshman 1938, plate XLVIIB: 13, XLVIIC: 15, XLVIIC: 7 (Sialk North Mound); Deshayes 1967, fig. 2d (Turang Tappeh); Malek Shahmirzadi and Nokandeh 2000, plate 12:12 (Aq Tappeh); Thornton 2013, fig. 15.6C (Sang-e Chakhmaq East Mound).



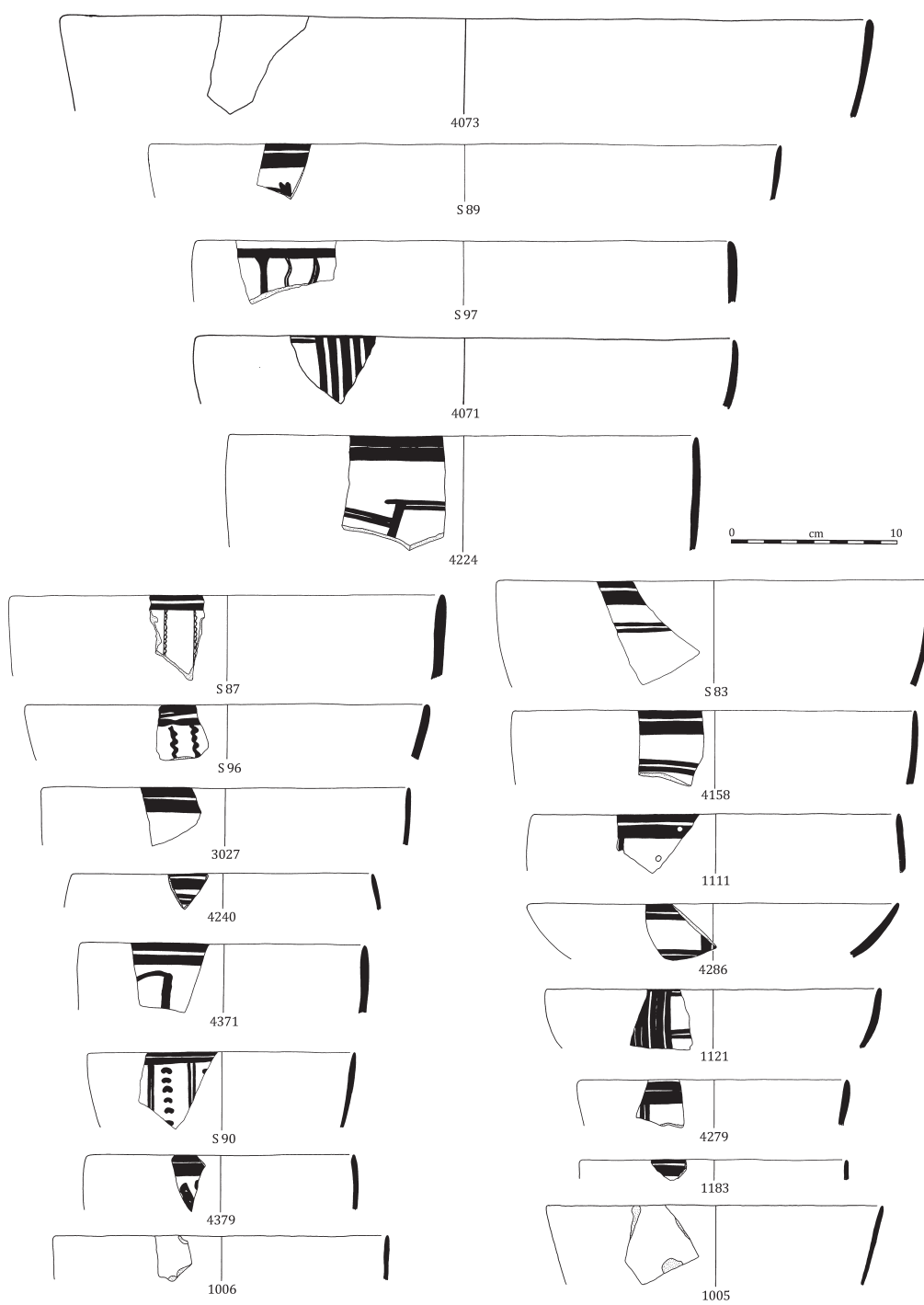


Figure 14. Red Ware; bowls (Drawing: A. Sharifi; K. Amiri).

Figure 14. Catalogue.

Sherd No.	Trench	Locus	Sherd No.	Trench	Locus
4037	4	401	4379	4	411
S 89	Surface	—	1006	I	100
S 97	Surface	—	S 83	Surface	—
4071	4	401	4158	Surface	405
4224	4	406	1111	I	101
S 87	Surface	—	4286	4	408
S 96	Surface	—	1121	I	101
3027	3	301	4279	4	408
4240	4	406	1183	I	102
4371	4	411	1005	I	100
S 90	Surface	—			

in the northeastern region. On the basis of the chronological context of the Ghaf Khāneh ceramics (late sixth millennium BCE), it appears that this specific design characterises the earlier part of the Cheshmeh Ali period, while it is absent at sites belonging to the latter part.<sup>39</sup>

There are two types of base in the Ghaf Khāneh ceramic collection: flat and concave (Fig. 15). Both can be painted, on either the inner or the outer surface, or plain. Those painted on the outer surface almost always have the same motif, in the form of multiple solid, nearly vertical bands terminating at the bottom of the base. Those that are painted on the inner surface have a limited range of motifs; these are parallel, horizontal and oblique bands, and a design that we call “the twig design” (Fig. 15: 4305, S116). It can be seen that the upper parts of the base fragments with painting on the inner surface are more oblique than those with painting on the outer surface. These pieces evidently belonged to open-mouth vessels, which allowed the painting to be easily applied on the inner surface (for example, Fig. 15: 4177, 4305).

As mentioned, no complete vessels or sherds large enough to represent a whole profile were found; therefore, the following descriptions of vessel forms are based on fragments, especially rim sherds. The range of vessel forms of the Ghaf Khāneh collection, inferred from the recovered fragments, is very limited. They can be divided into four groups: bowls, pots, cups and jars.

**Bowls.** Bowls are defined here as vessels with mouth diameters of 15 cm or more; vessels with mouth diameters below this range are classified as cups (see below). The largest bowl measures 38 cm in mouth diameter. The rim and the upper part of body in this category are vertical or nearly vertical. As no specimen with a whole profile was found, the depth of the bowls is not

<sup>39</sup> Dyson and Thornton (2009, pp. 12–13, figs. 9a and 9b) noticed the widespread distribution of this specific design and rightfully indicated its status as linking the site levels from the Central Plateau to the Gorgan Plain in the northeast. They were, however, not certain about the chronological placement of this design.

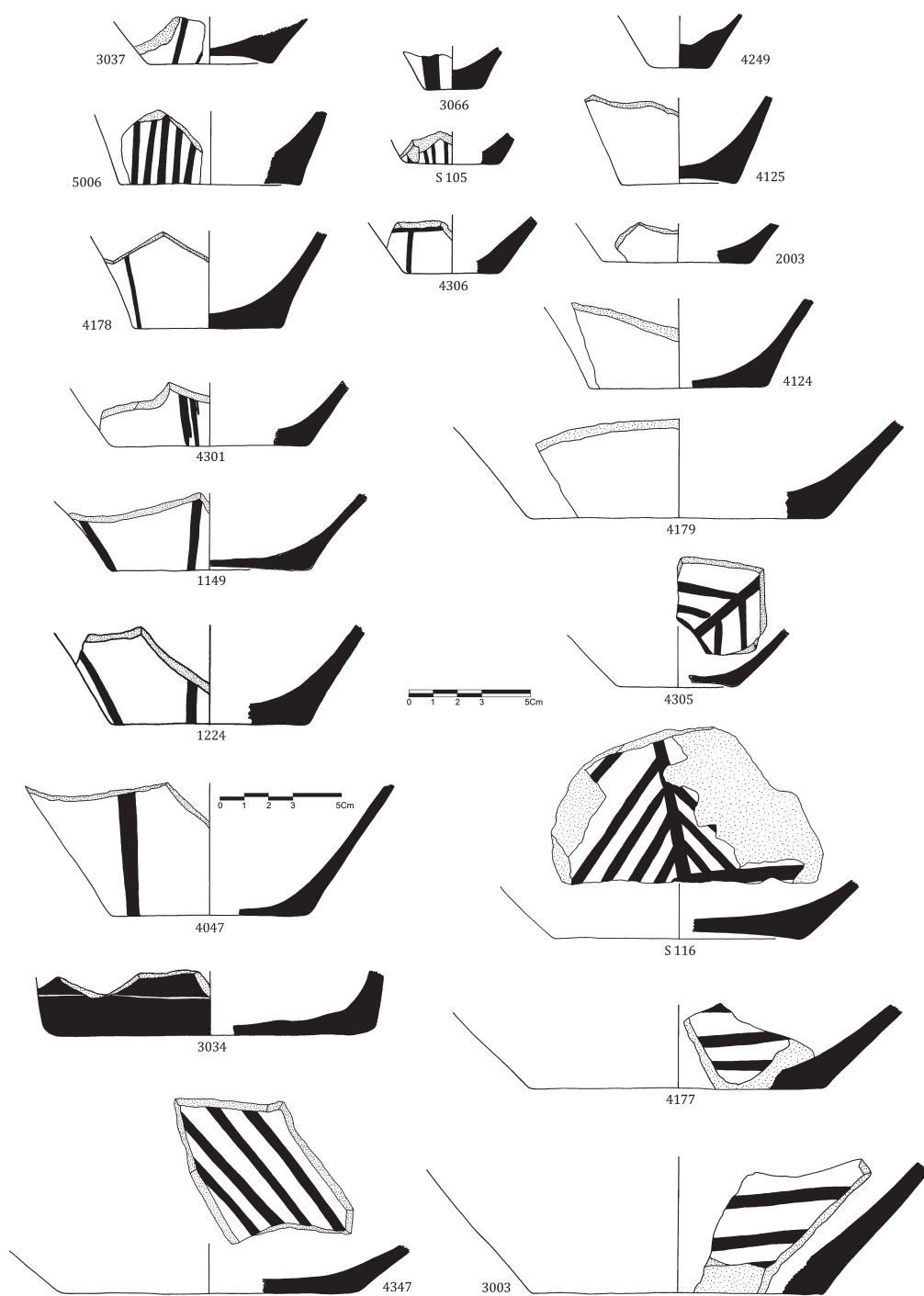


Figure 15. Red Ware; base fragments (Drawing: A. Sharifi; K. Amiri).

Figure 15. Catalogue.

Sherd No.	Trench	Locus	Sherd No.	Trench	Locus
3037	3	301	4306	4	408
5006	5	501	4249	4	406
4178	4	405	4125	4	403
4301	4	408	2003	2	200
1149	1	101	4124	4	403
1224	1	103	4179	4	405
4047	4	400	4305	4	408
3034	3	301	S 116	Surface	—
4347	4	409	4177	4	405
3066	3	303	3003	3	300
S 105	Surface	—			

known. They include both plain and painted versions; the painting on the latter is always applied on the outer surface (Fig. 14).

**Pots.** These vessels, as their name implies, have an inward-bending rim. Here, again, vessels with a mouth diameter of less than 15 cm have been categorised as cups (see below). The largest specimen in this category has a mouth diameter of 30 cm (Fig. 16). Pots include both plain and painted examples; the latter are always painted on the outer surface. The inward curvature of body and rim differs substantially between specimens.

**Cups.** As mentioned above, in this study, vessels with a mouth diameter of less than 15 cm have been classified as cups (Fig. 17). These vessels are, in fact, smaller examples of the Bowls and Pots. In terms of paste and body thickness, this group contains the finest pieces among the Ghaf Khāneh vessel forms. As with the other groups, cups include both plain and painted examples; the latter are always painted on the outer surface.

**Jars.** This rare form is represented by only two fragments in the collection (Fig. 16: 4328, 4345). Both specimens have a wide, open mouth. Sherd no. 4345 has painting on the inner surface of its wide mouth. The rare occurrence of the jar form in the Cheshmeh Ali ceramic industry has also been noticed at other sites, in the Central Plateau.<sup>40</sup>

Finally, it should be noted that 67 sherds in the Ghaf Khāneh collection have a brown surface colour (5YR 4/2, dark reddish grey); these comprise just 1.8 per cent of the total. In most of these specimens, the paste colour is brown, but there is one sherd with red paste; in terms of other attributes, there is no difference between this ware and the Red Ware. Both painted and plain specimens are present (for example, Fig. 13: 23, 26). It is likely that this ware is an unintentional variant of the Red Ware.

<sup>40</sup> For example, Majidzadeh 2010, p. 25, plates 5:12, 17:1; Wong *et al.* 2010, p. 12.

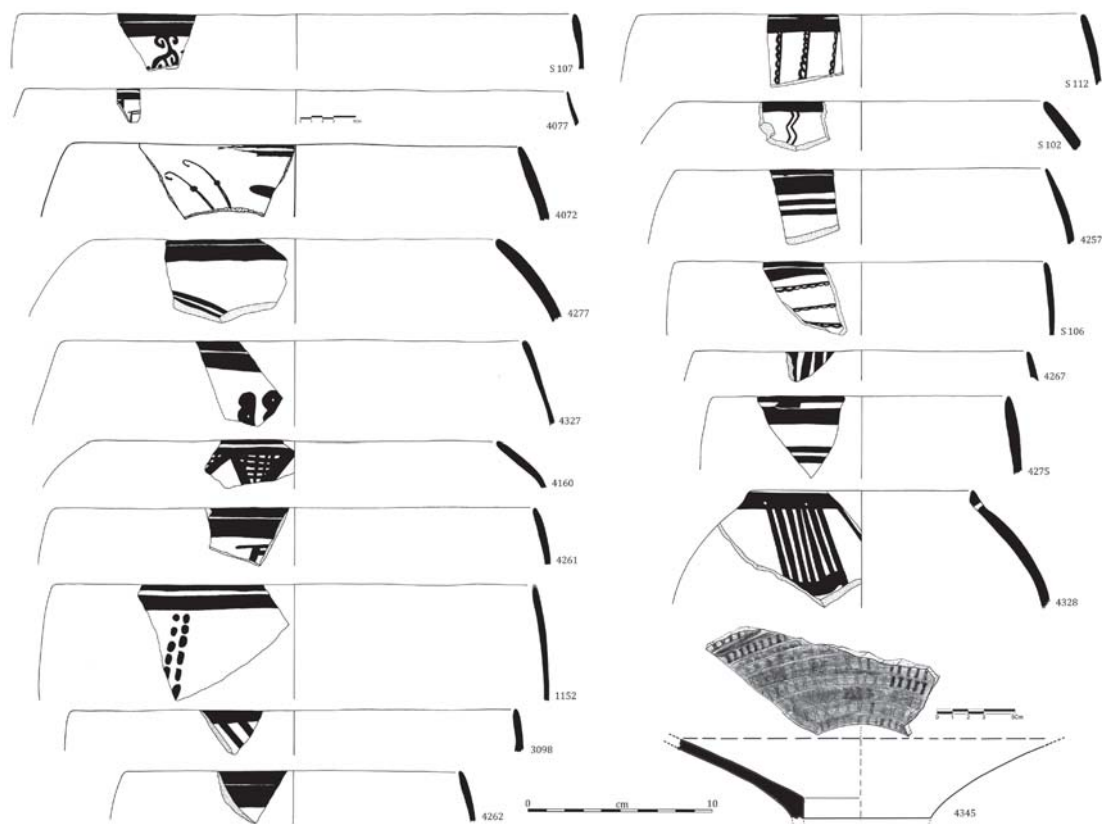


Figure 16. Red Ware; pots and jars (Drawing: A. Sharifi; K. Amiri).

Figure 16. Catalogue.

Sherd No.	Trench	Locus	Sherd No.	Trench	Locus
S 107	Surface	—	4262	4	407
4077	4	401	S 112	Surface	—
4072	4	401	S 102	Surface	—
4277	4	408	4257	4	406
4327	4	409	S 106	Surface	—
4160	4	405	4267	4	407
4261	4	407	4275	4	408
1152	I	102	43298	4	409
3098	3	308	4345	4	409

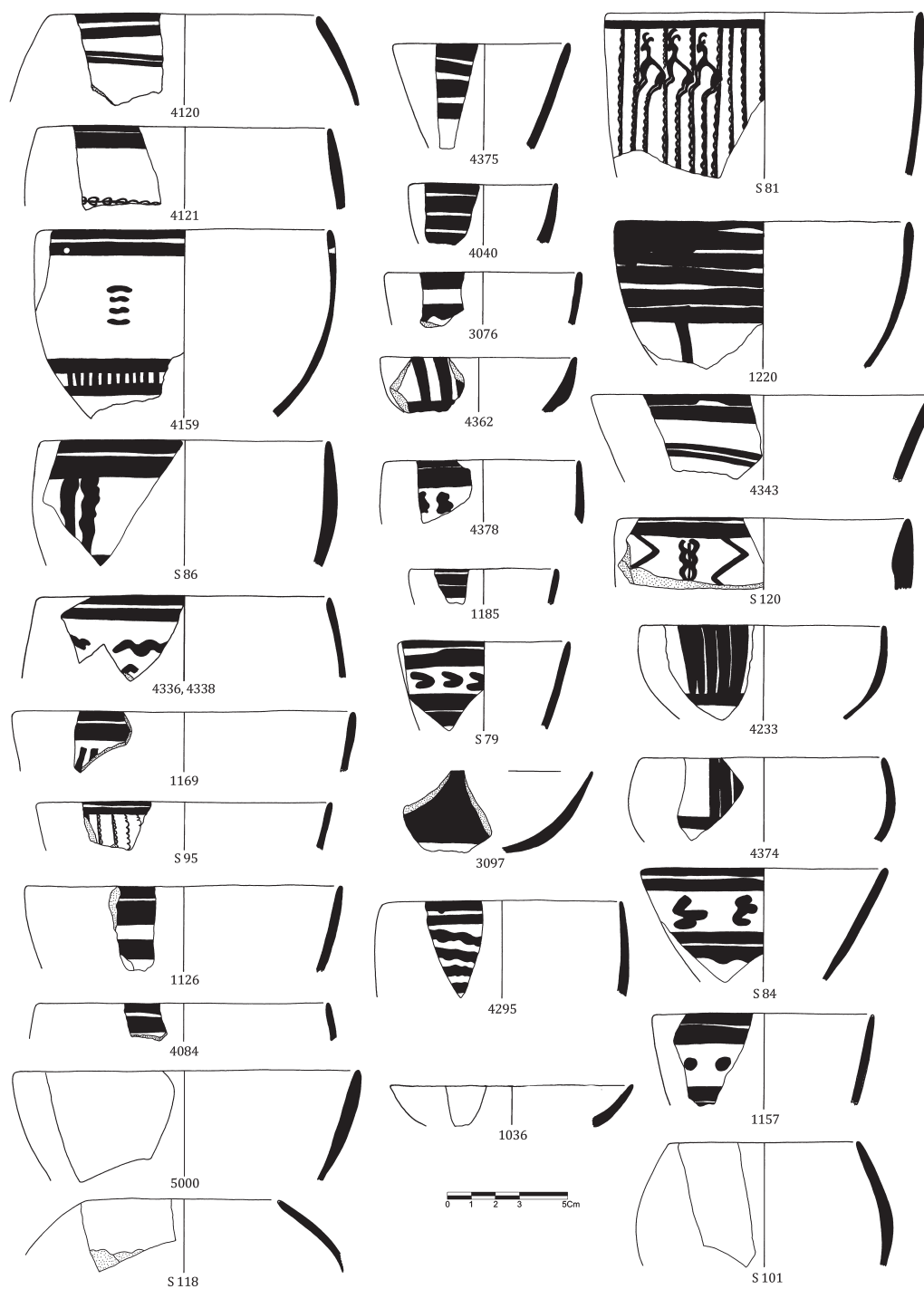


Figure 17. Red Ware; cups (Drawing: A. Sharifi; K. Amiri).



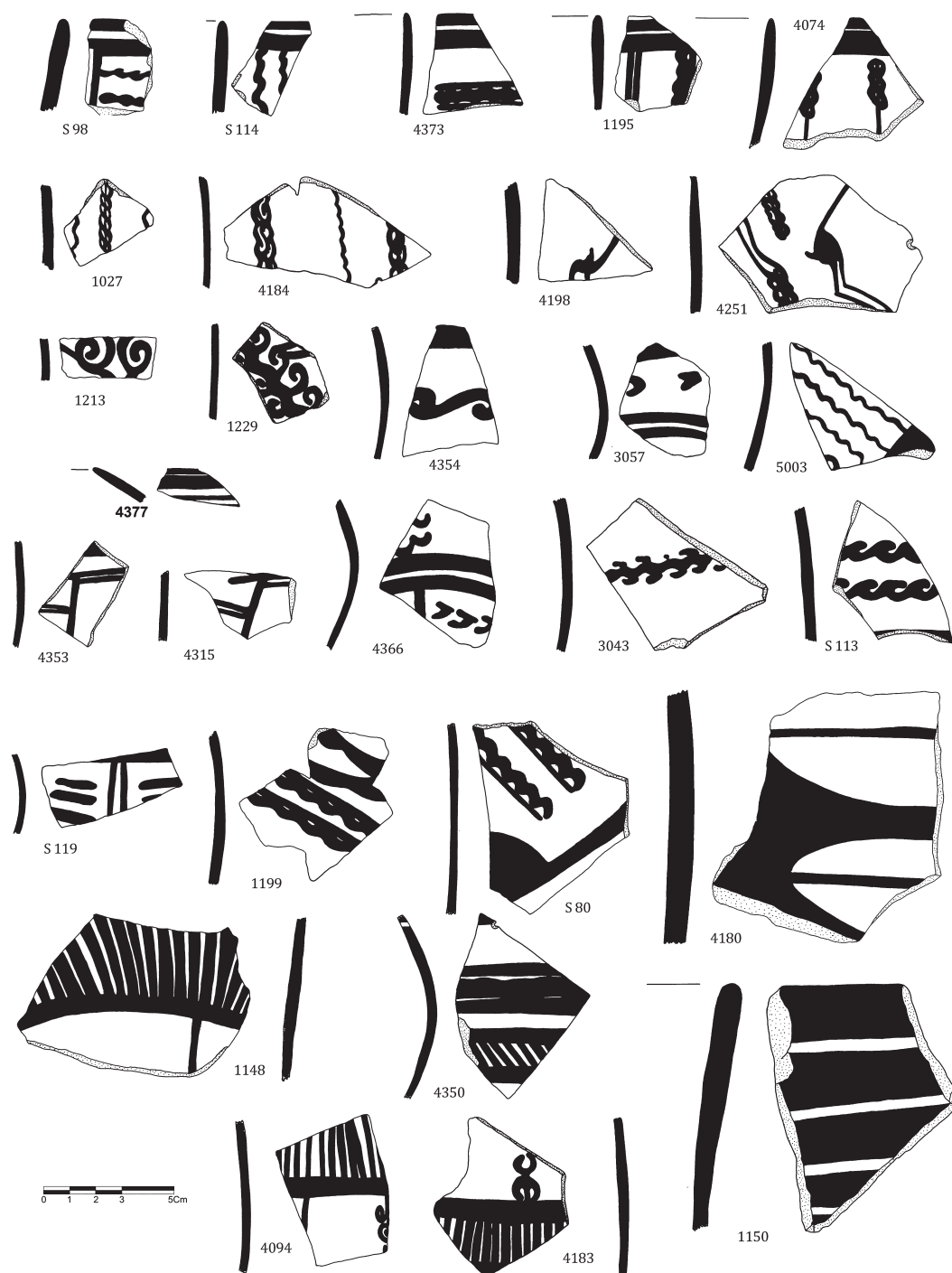


Figure 18. Red Ware; rim and body fragments (Drawing: A. Sharifi; K. Amiri).

Figure 17. Catalogue.

Sherd No.	Trench	Locus	Sherd No.	Trench	Locus
4120	4	403	4378	4	411
4121	4	403	1185	1	102
4159	4	405	S 79	Surface	—
S 86	Surface	—	3097	3	307
4336, 4338	4	409	4295	4	408
1169	1	102	1036	1	101
S 95	Surface	—	S 81	Surface	—
1126	1	101	1220	1	103
4084	4	401	4343	4	409
5000	5	500	S 120	Surface	—
S 118	Surface	—	4233	4	406
4375	4	411	4374	4	411
4040	4	400	S 84	Surface	—
3076	3	303	1157	1	102
4362	4	410	S 101	Surface	—

Figure 18. Catalogue.

Sherd No.	Trench	Locus	Sherd No.	Trench	Locus
S 98	Surface	—	4353	4	409
S 114	Surface	—	4310	4	408
4373	4	411	4366	4	410
1195	1	102	3043	3	301
4074	4	401	S 113	Surface	—
1027	1	100	S 119	Surface	—
4184	4	405	1199	1	102
4198	4	405	S 80	Surface	—
4251	4	406	4180	4	405
1213	1	102	1148	1	101
1229	1	103	4350	4	409
4354	4	409	1150	1	102
3057	3	302	4094	1	401
5003	5	5012	4183	4	405
4377	4	411			

*Grey Ware*

Altogether, 171 pieces of Grey Ware were recovered from the excavated trenches; that is, about 4.6 per cent of the whole collection (Table 2; Fig. 19). Technologically, there is no discernible difference between the Red Ware and the Grey Ware apart from the surface colour and painted decoration. The surface of the Grey Ware is always highly burnished (Fig. 13: 24, 27, 28). None of the recovered sherds is painted, and, in terms of vessel forms, only pots and cups are represented. The surface colour ranges from grey (5/N) to black (2.5/N), but in some cases, different colours are seen on the same sherd, likely due to changes in temperature during baking.

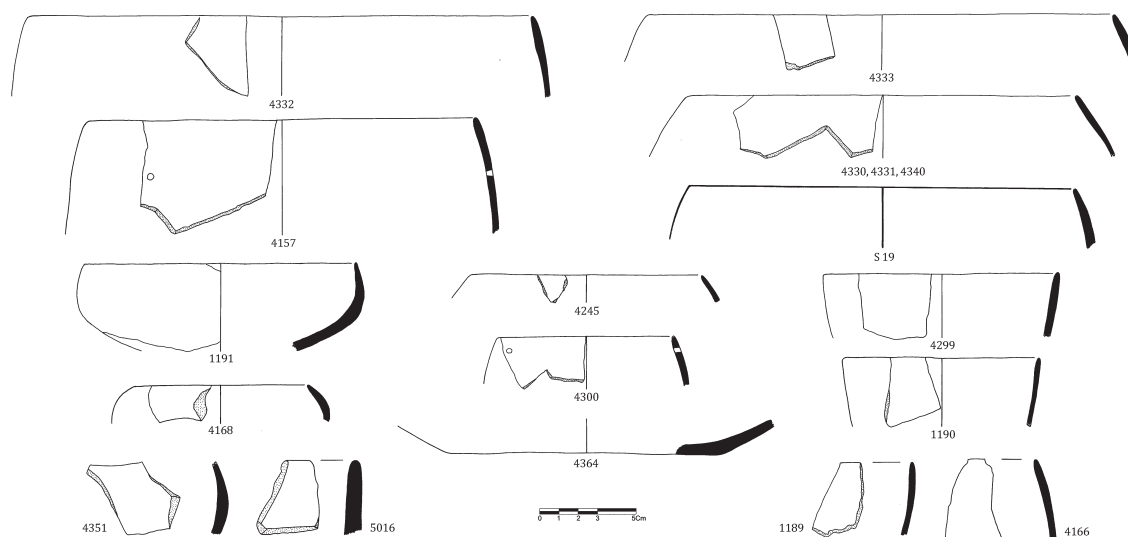


Figure 19. Grey Ware (Drawing: A. Sharifi; K. Amiri).

Figure 19. Catalogue.

Sherd No.	Trench	Locus	Sherd No.	Trench	Locus
4332	4	409	4364	4	410
4157	4	405	4333	4	409
1191	1	102	4330, 4331	4	409
4168	4	405	S 19	Surface	—
4351	4	409	4299	4	408
5016	5	503	1190	1	102
4245	4	406	1189	1	102
4300	4	408	4166	4	405

*Buff Ware*

Just 30 pieces of Buff Ware (7.5YR 7/4, pink) were found in the excavated trenches; that is, 0.8 per cent of the whole assemblage (Table 2; Figs 13, 20). Here, again, from a technological point of view, there is no discernible difference between this ware and the Red Ware, but unlike the Grey Ware, there are both painted and plain specimens. It should be noted, however, that some sherds in this group seem to lack the fine surface treatment of the Red Ware. In some cases, different colours are seen on the same sherd due to uneven firing. The only form that can be discerned in this small collection of Buff Ware is the bowl.

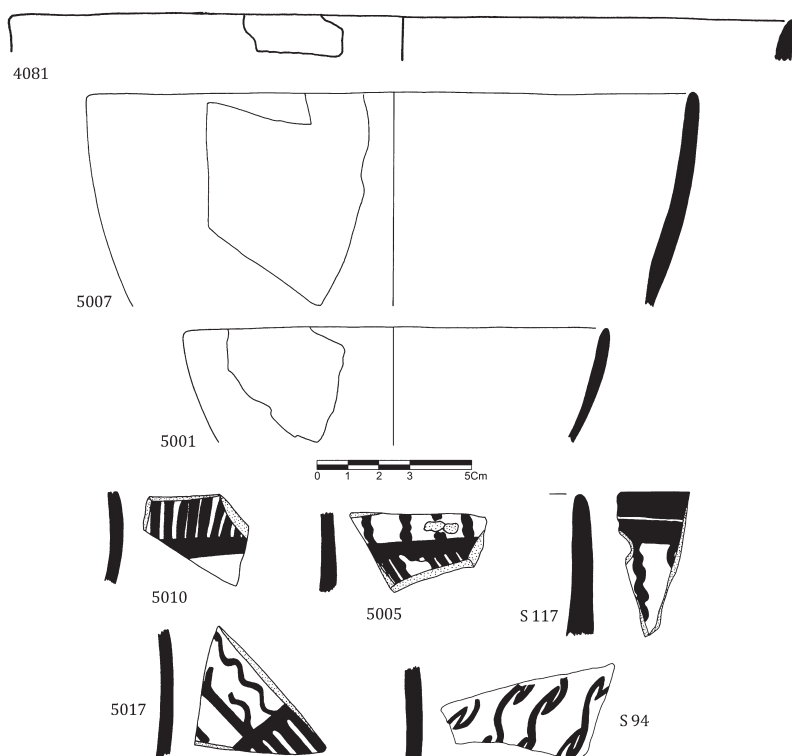


Figure 20. Buff Ware (Drawing: A. Sharifi; K. Amiri).

Figure 20. Catalogue.

Sherd No.	Trench	Locus	Sherd No.	Trench	Locus
4081	4	401	5005	5	501
5007	5	502	S 117	Surface	—
5001	5	500	5017	5	503
5010	5	502	S 94	Surface	—

### Chipped stone artefacts

In total, 111 pieces of chipped stone artefacts were recovered from the excavated trenches (Table 3). The overwhelming majority were made from a light brown chert, usually mottled, which is quite frequent at prehistoric sites of the region.<sup>41</sup> We also found, however, a single piece of obsidian on the surface (Fig. 21:12). The main element in the collection is bladelets, comprising more than 50 per cent of the assemblage. The next most common artefact is flakes, which make up almost a quarter of the whole. Items such as blades, drills, end scrapers and microburins appear in small quantities. There are, in addition, a few large flakes, made from a coarse dark brown stone, perhaps some kind of igneous rock like basalt, which appear only on the surface (Fig. 22:4–6, 8–10). These artefacts clearly differ from the chipped stone collected from the excavation, and might be dated to the Middle Palaeolithic.<sup>42</sup> Similar surface scatters have been recorded at some sites a few kilometres to the west.<sup>43</sup>

Table 3. Various categories of finds from the excavated trenches at Ghaf Khāneh.

	Chipped stone	Ground stone	Stone vessel	Copper object	Chipped ceramic disk	Pounder
Trench 1	14	—	—	—	—	—
Trench 2	2	—	—	—	—	—
Trench 3	4	4	1	1	2	—
Trench 4	84	15	—	1	—	1
Trench 5	7	—	—	1	—	—
Total	111	19	1	3	2	1

### Large stone artefacts

Fifteen fragments of ground stone, all sandstone, were recovered from the trenches. None, however, was large enough to allow the original shape to be reconstructed. Most of these fragments still retain part of their original flat or slightly concave working surface, while the opposite surface is usually convex (Fig. 22:2). Two specimens show part of a fairly deep depression, suggesting that they may originally have functioned as mortars, rather than grinding slabs (Fig. 22:1). On a few specimens, there were traces of red ochre. In addition to these items, an oval stone was also found (Fig. 22:3); its shape is reminiscent of a pounder, but there is no sign of battering on its tips. Two small adzes were discovered on the surface, both made of a fine-grained stone, probably limestone. Their surfaces were somewhat polished and there were some chipping scars on the edges due to usage (Fig. 22:7, 11). Similar adzes have been found at the earlier, Chakhmaq-period sites of the Shahrud area.<sup>44</sup>

<sup>41</sup> For example, Rezvani and Roustaei 2016, p. 19; Roustaei 2016b, p. 57.

<sup>42</sup> H. Vahdati Nasab, pers. comm., Oct. 2016.

<sup>43</sup> See Roustaei 2006, p. 24.

<sup>44</sup> Roustaei 2016b, fig. 26:S4.

### Small finds

There were a handful of small finds from the excavated trenches (Table 3). These are two chipped ceramic discs (Fig. 21:9), a rim fragment of a stone vessel (Fig. 21:4), and three pieces of copper (Fig. 21:1–3). The copper pieces were found in trenches 3, 4 and 5. Two are tiny, cylindrical objects, resembling a needle or pin, and one is a small bead.

### Radiocarbon dates

Two Accelerator Mass Spectrometry (AMS) dates are available for Ghaf Khāneh, both from Trench 4 (Table 4). These dates show a narrow time range, from 5200 to 4960 BCE. Considering the rather thin archaeological deposit of Ghaf Khāneh, we may safely suggest that this time range could be extended for the whole sequence. The obvious homogeneity observed in the ceramics recovered from all the trenches corroborates the inference of the short duration of the site drawn from the radiocarbon dates.

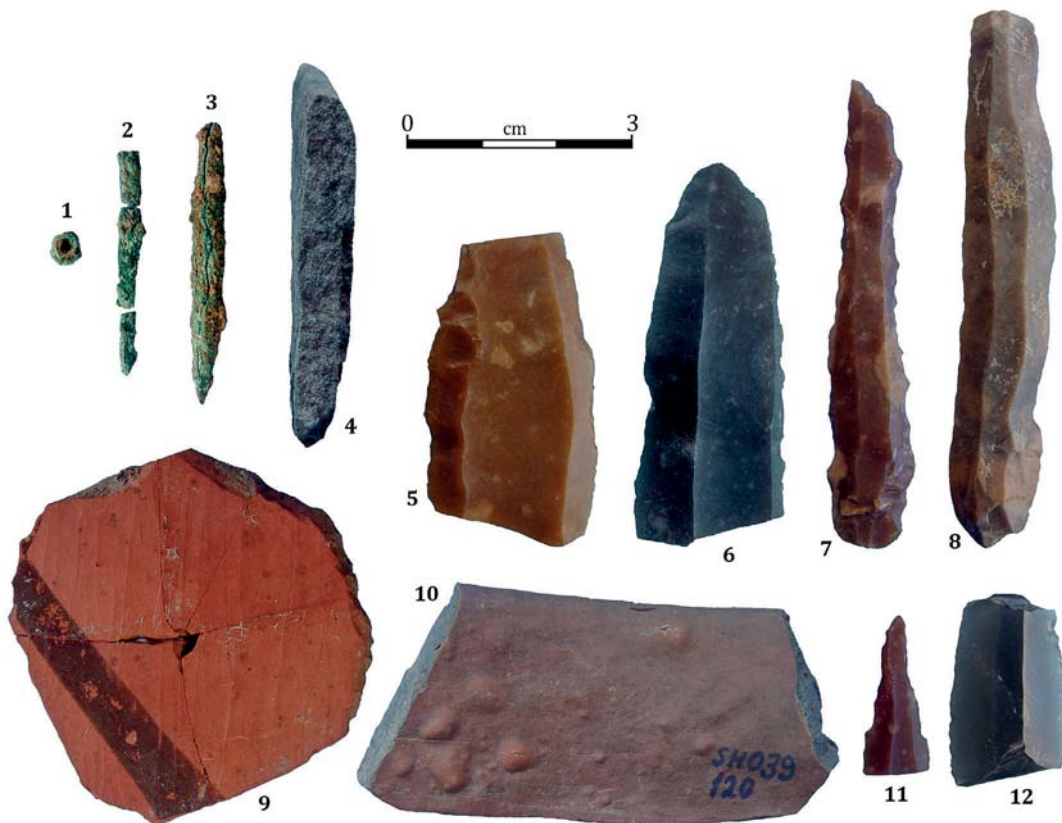


Figure 21. A selection of lithics and small finds (© K. Roustaei).



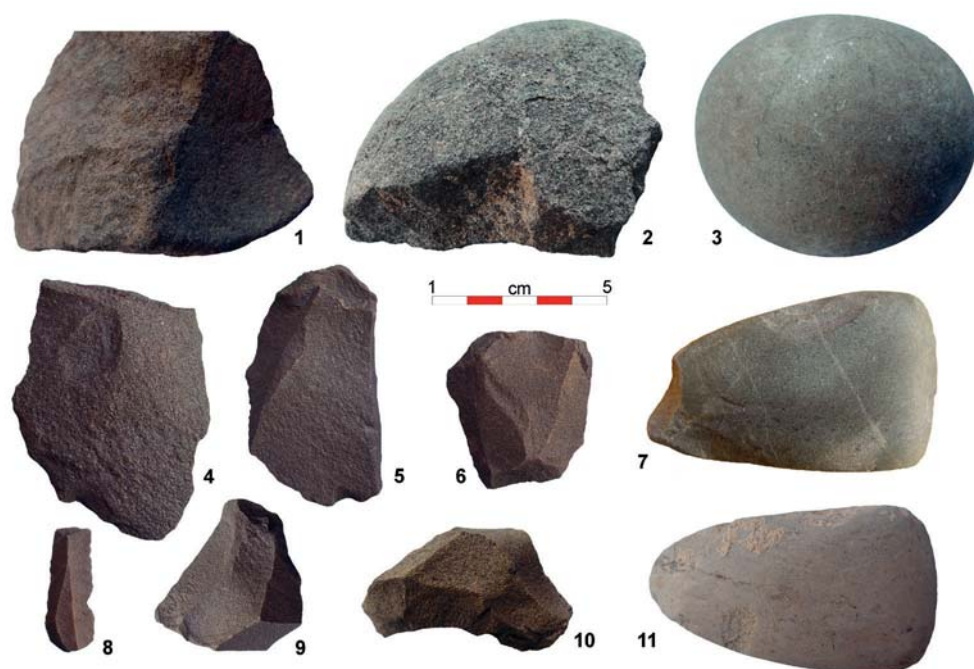


Figure 22. A selection of large stone artefacts (© K. Roustaei).

Table 4. The  $^{14}\text{C}$  dates for Ghaf Khāneh.

Lab Code	Provenance (Trench&Locus)	Material	Lab Determination BP	Calibrated Date BC, 2 sigma (95.4%)
OxA-18584	Tr. 4, L.408	Charcoal	6120±31	5208-4961
OxA-18585	Tr. 4, L.410	Charcoal	6137±32	5210-4996

## Discussion

As we expected based on its topography, Ghaf Khāneh is not a site with a significant cultural deposit, its thickness in the excavated trenches varying from 70 to 30 cm (Table 1). This rather thin sequence suggests a short occupation, a notion that is confirmed by the narrow range of radiocarbon dates and the obvious uniformity seen in the ceramics recovered from the sequence.

The absolute dates of Ghaf Khāneh, presented here, are the first radiocarbon dates for the Cheshmeh Ali period sites of the northeastern region. These dates, along with newly published dates for the earlier Neolithic sequence of the region, documented at several sites in the Shahroud area and northern Khorasan,<sup>45</sup> have established a nearly 2000-year chronometric framework for

<sup>45</sup> For example, Roustaei *et al.* 2015, pp. 590–591, Table 3, Rezvani and Roustaei 2016, p. 20, Table 1, Roustaei 2016b, p. 61, Table 2 (Shahroud); Garazhian *et al.* 2014, Tables 1, 3 (Khorasan).

the cultural development of the region during the first half of the Holocene. Considering the general time range that has been proposed for the Cheshmeh Ali culture, *c.* 5300/5200–4400/4300 BCE,<sup>46</sup> the Ghaf Khāneh dates fall at the very beginning of the period. These dates are significant when it comes to the emergence of Cheshmeh Ali culture, since they are amongst the oldest available for this period in the Central Plateau and northeastern region. It should be noted that in the northeastern region the Cheshmeh Ali period was preceded by the final phase of Chakhmaq culture, best documented at Kalāteh Khān (*c.* 5700–5300 BCE), some 10 km farther west,<sup>47</sup> which had a completely different ceramic assemblage.

Save for the ceramic assemblage, however, we know little about the emergence of Cheshmeh Ali culture in this area. The problem stems from the fact that the transition from the earlier Chakhmaq culture (*c.* 7000–5300 BCE) to the Cheshmeh Ali culture has not yet been documented at a single site. Although all seven known Chakhmaq culture sites in the Shahroud area had a small percentage of Cheshmeh Ali ceramics on their surfaces, excavations at Sang-e Chakhmaq East Mound, Deh Kheir, and Kalāteh Khān<sup>48</sup> failed to provide convincing evidence for the sharp change in the ceramic assemblages, simply because the Cheshmeh Ali ceramics were nowhere associated with *in situ* deposits, but only occurred as surface sherd scatter. Cheshmeh Ali ceramics at these sites were recovered from disturbed top soil with no clear stratification.

One of our main objectives in excavating Ghaf Khāneh—namely, to discover the nature and function of the site—remained rather elusive. As mentioned earlier, no trace of ordinary architecture of any kind was found in the excavated trenches. There were, however, the feature interpreted as small hearth (see above), and most importantly, locus 404 of Trench 4, a large, circular patch of reddened, gravel-rich deposit. This locus can be interpreted as the remnants of a large heating structure, like a kiln or oven. Supporting evidence for this claim is as follows: first, as mentioned earlier, the feature was thoroughly reddened due to exposure to intense fire; second, the main bulk of the feature was composed of angular gravel, of a kind not observed in other trenches; and third, it contained the fewest portable cultural materials among the excavated deposits in the trench, a situation that can be interpreted as the deposit belonging to a ‘structure’, rather than being a place for ordinary daily refuse. Large hearths or kilns with similar attributes have been found in the preceding Chakhmaq culture sites in the Shahroud area, where their remains were to a large extent recognisable. The closest example to the one at Ghaf Khāneh, both temporally and spatially, is the partially excavated feature at Kalāteh Khān, about 5 km southwest of Ghaf Khāneh.<sup>49</sup> There, a large hearth or kiln, partly exposed in Trench 1,<sup>50</sup> showed several burnished, delicate clay floors interspersed with, alternatively, reddened clay materials and compact gravel layers. This feature can be dated to around the mid-sixth millennium BCE based on several <sup>14</sup>C dates for the site’s sequence. Therefore, we suggest that the remains of the feature exposed in Trench 4 may belong to a large heating structure, such as a kiln or oven, the specific function of which remains unknown. Recognising the feature in Trench 4 as a structure of this

<sup>46</sup> Dyson and Thornton 2009, p. 19.

<sup>47</sup> See Roustaei 2016b.

<sup>48</sup> Roustaei 2014 (Sang-e Chakhmaq East Mound); Rezvani and Roustaei 2016 (Deh Kheir); Roustaei 2016b (Kalāteh Khān).

<sup>49</sup> Roustaei 2016b.

<sup>50</sup> Roustaei 2016b, fig. 10.



Figure 23. Satellite image showing Shir Ashian and Tappeh Hesar in their geomorphologic setting (Google Earth).



Figure 24. Satellite image showing the geomorphologic setting of Shir Ashian in the sand dune belt between the alluvial fans and alluvial plain (Google Earth).

type would still not answer the question of the site's nature. However, if we put it together with the lack of architecture in the excavated trenches and the comparatively high ratio of ceramic fragments per the volume of deposit (Table 1), along with the discovery of two sherds on the site surface with clear signs of over-firing (Fig. 21:10), it can be proposed that the site was probably a place of ceramic production.

In connection with the above, it may be useful to look at a similar site, Shir Ashian, near Damghan, excavated by E. Schmidt in 1932.<sup>51</sup> The site is located at the end of an alluvial fan about 60 km to the southwest of Ghaf Khāneh (Figs 1, 23). It comprises an extensive dense sherd

<sup>51</sup> Schmidt 1937, p. 17.





Figure 25. Dense sherd scatter on top of a sand dune at Shir Ashian (© K. Roustaei, July 2009).

scatter site, formed on top of a series of sand dunes which are part of the dune belt stretching along the border between the alluvial fans and the alluvial plain west of Damghan (Fig. 24). Schmidt's extensive test excavations (500 sq. m. in total) at four sherd-covered-dunes of the site apparently produced nothing but a few small objects such as beads, flint blades, clay objects called "drill heads" or finials, and pottery sherds.<sup>52</sup> The maximum depth of the excavations was 60 cm, at which point a human burial was unearthed.<sup>53</sup> No wall or trace of architecture was encountered. Schmidt in his short account of the excavation at Shir Ashian concluded that it might have been a camp site, contemporaneous with the earliest sub-level of Tappeh Hesar (Hissar IA).<sup>54</sup> Dyson and Thornton in their 2009 article about fifth millennium BCE cultural development in northern Iran, attempted to fit Shir Ashian into a prehistoric chronological framework of the region. They suggested its material belonged to the final stage of Cheshmeh Ali culture, corresponding to the Anau IA phase in southern Turkmenistan, dated to 4700/4600–4400/4300 BCE. This is a reasonable suggestion that conforms well with available data.

I visited Shir Ashian on two occasions, in January and July 2009, and collected almost 50 sherds from the site surface. As Schmidt observed, the site is a sherd scatter, with various density, on top of sandy silt dunes (Fig. 25). The dunes are dissected by numerous seasonal streams

<sup>52</sup> Dyson and Thornton 2009, pp. 6–17.

<sup>53</sup> Dyson and Thornton 2009, p. 18.

<sup>54</sup> Schmidt 1937, p. 17.



Figure 26. A selection of surface ceramics from Shir Ashian (© K. Roustaei).

originating from higher alluvial fans at the foot of Alborz Mountains. In comparison with the spatial distribution of modern villages in the area, the natural setting of Shir Ashian is odd; that is, on sand dunes rather than the plain itself (Fig. 24). We used a trowel to test several spots at the site and examine the nature of the deposit underneath. What we found was homogenous, loose, limonite-mottled, sandy silt with almost no sherds, unlike the clay-rich deposits of an ordinary mounded site. Numerous sherds blanket the surface; all examples of the typical late Cheshmeh Ali ware (Figs 26, 27). An important point about the ceramic collection of Shir Ashian is the unusual frequency of over-fired and deformed ceramics (Figs 27, 28), an aspect that is apparently absent from the Pennsylvania small sherd collection and was not mentioned by Dyson and Thornton.<sup>55</sup>

Putting together all the evidence from Shir Ashian—that is, its odd natural setting (unsuitable for an ordinary village site), the lack of substantial archaeological deposits (based on both the Schmidt excavation and this author's observations), a rather high frequency of ceramic fragments with clear signs of over-firing and of deformed pieces, and Schmidt's impression of the site as a "camp site"—we may suggest that it functioned primarily as a place of ceramic production, rather than being part of an ordinary village. In this regard, Ghaf Khāneh can be compared with Shir Ashian, as they share a series of similar characteristics. Nevertheless, they are separated temporally by at least 400 years.

Although the ceramic collection of Ghaf Khāneh is technologically reminiscent of that from the large nearby site of Siah Tappeh (Fig. 29), and both obviously belong to the Cheshmeh Ali

<sup>55</sup> Dyson and Thornton 2009, pp. 9–14.

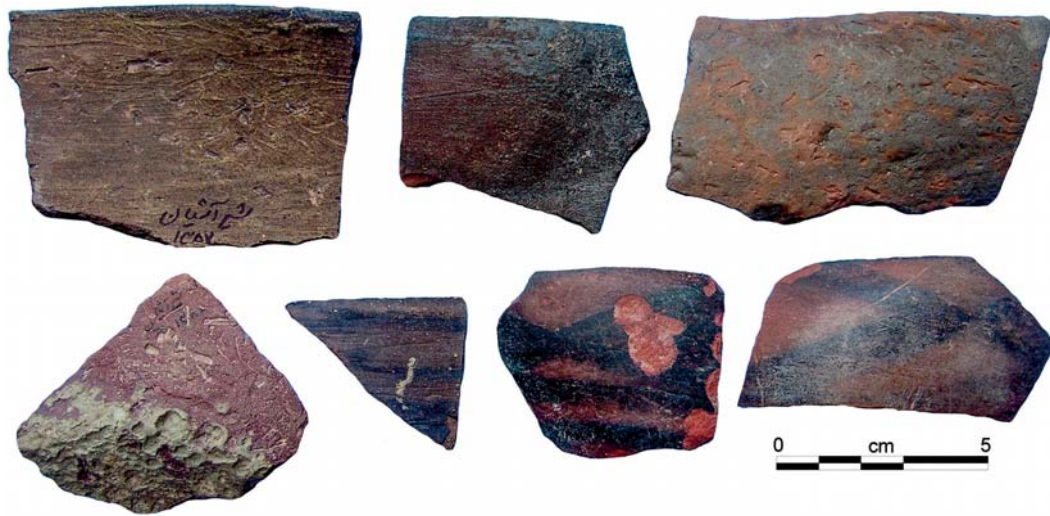


Figure 27. Deformed and over-fired ceramics from Shir Ashian (© K. Roustaei).



Figure 28. Two examples of deformed ceramic fragments from Shir Ashian (© K. Roustaei).





Figure 29. Red Ware of Siah Tappeh (© K. Roustaei).

culture, comparison of the two collections in terms of the decorated motifs seems to point to some chronological distance between them. In the absence of any absolute dating for the Siah Tappeh settlement, we may suggest that the two sites were not occupied simultaneously or that they overlapped for only a short period of time. In view of the available dates for Ghaf Khāneh, which put the site at the very beginning of the Cheshmeh Ali period, Siah Tappeh might post-date it by at least a number of centuries. Therefore, it seems that one of our initial presumptions, that there might be a relationship between the two sites, can no longer stand.

As stated earlier, the ceramic collection of Ghaf Khāneh is dominated by Red Ware, which is the most ubiquitous aspect of Cheshmeh Ali culture throughout the Central Plateau and the northeastern region. The occurrence in the Ghaf Khāneh collection of Buff Ware and Grey Ware, admittedly in very small quantities, along with the predominant Red Ware has also been reported from a few excavated sites in the Central Plateau.<sup>56</sup> These two types of ceramics, in addition to the brown ware version of the Red Ware, could be seen as a consequence of uncontrolled heat exposure during pottery production, rather than the result of a deliberate action by potter. Needless to say, there is no doubt about the contemporaneity of these classes of wares, because they have been found in the same context throughout the Ghaf Khāneh sequence. In fact, the co-existence of small quantities of the Grey Ware and Buff Ware with the dominant Red Ware has also been observed at Siah Tappeh, where the Grey Ware, contrary to at Ghaf Khāneh, occurs in both plain and painted forms (Figs 29–31). Based on the available information on the

<sup>56</sup> For example, Malek Shahmirzadi 2005, p. 42.



Figure 30. Buff Ware of Siah Tappeh (© K. Roustaei).



Figure 31. Gray Ware of Siah Tappeh (© K. Roustaei).

ceramic traditions of the mid-Holocene in the Shahroud/Damghan areas, it is difficult to say if there is some sort of connection between the “early” manifestation of the Grey ware during the Cheshmeh Ali period, as represented in the Ghaf Khāneh and Siah Tappeh collections, and the dominant tradition of the Bronze Age Grey Ware of northeast Iran.

One further point worth mentioning about the preservation of Ghaf Khāneh is the issue of deflation. It is likely that the process has affected the site to a certain degree, as evidenced by the high concentration of surface gravel and ceramic fragments. This reasoning, however, cannot be used to explain the lack of architecture in lower levels of the site. Nevertheless, it is acknowledged that the small size of the trenches could be invoked for such an apparent absence.

## Conclusion

The site of Ghaf Khāneh was sounded in five trenches and proved to be a single-period, short-lived occupation dating to the late sixth millennium BCE. Based on chronology of the Chakhmaq Neolithic period of the northeast region (*c.* 7000–5300 BCE),<sup>57</sup> the Ghaf Khāneh occupation immediately follows the Chakhmaq sequence, heralding the beginning of the Cheshmeh Ali period in the region. This period would be replaced in turn by Hesar I culture in the second half of the fifth millennium BCE.<sup>58</sup>

Ghaf Khāneh was a short-lived occupation, lasting probably for a few generations. Determining the exact duration of the occupation is not straightforward, but considering the thinness of the archaeological deposit (less than 70 cm, **Table 1**), the apparent lack of architecture, and the nearly identical time ranges of the two available <sup>14</sup>C dates, it is unlikely to have been more than a century.

The ceramic assemblage from the site contains the characteristic Cheshmeh Ali Red Ware, distributed at numerous sites all over the Central Plateau and the western parts of the northeast region. Considering the short duration of the Ghaf Khāneh site, a rather large assemblage of ceramics, including various vessel forms and painted designs, and two radiocarbon dates available for the site, the absolutely-dated ceramic corpus of Ghaf Khāneh can be used as a criterion for dating the contemporary sites of the region based on their surface ceramics.

Ghaf Khāneh was apparently not an ordinary settlement but, perhaps, a small, industrial one, related in one way or another to ceramic vessel production. A lack of ordinary architecture in the excavated trenches, the absence of animal bones, either as artefact or as meal refuse, and the thin archaeological deposit all suggest that we are dealing with a special-purpose site with little resemblance to an ordinary village site.

Excavation at Ghaf Khāneh provided a unique opportunity to gain some insights into the nature and type of archaeological accumulations at sherd scatter sites. Further information from similar sites would enhance our understanding of various aspects of ancient life. The traditional preference of most archaeologists for excavating multi-period mounded sites has created serious bias in the way we interpret the past. The case of Ghaf Khāneh demonstrates that all the important ancient records of the past are not necessarily hidden in mounded settlement sites.

<sup>57</sup> For example, Roustaei 2016b; Roustaei *et al.* 2015.

<sup>58</sup> Gürsan-Salzmann 2016.

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## BOOK REVIEWS

Christopher P. Thornton, Charlotte M. Cable, and Gregory L. Possehl (eds), *The Bronze Age Towers at Bat, Sultanate of Oman: Research by the Bat Archaeological Project, 2007–12*. University Museum Monographs 143. Philadelphia, PA: University of Pennsylvania Museum of Archaeology and Anthropology, 2016. Pp. 330, 242 figs, 9 colour insets, 13 tables. ISBN 9781934536070.

*The Bronze Age Towers at Bat, Sultanate of Oman* is volume 143 in the reliably high-quality monograph series of the Pennsylvania University Museum, edited by Christopher P. Thornton and Charlotte Cable and dedicated to the late Gregory Possehl, who is listed as co-editor but did not live to see the volume in print. The basic project design goes back to him, as clearly spelled out in the acknowledgement pages, and he is credited as the academic mentor of the main editors as well as of many expedition members.

The richly illustrated and carefully edited volume covers the first six seasons of excavations in the oasis of Bat in Oman directed by Possehl, and offers a comprehensive and straightforward report on the results of this work, presented by individual members of the expedition. By necessity, some of the text remains preliminary; a future volume covering the results of the subsequent field seasons will certainly round off the analysis. But already at this stage, the book makes a welcome contribution towards a better knowledge of the Bronze Age of Oman.

The book proceeds through 13 chapters and is framed by a general introduction (ch. 1) and a conclusion (ch. 13) provided by the main editors, Thornton and Cable. The presentation begins with a study of the environment (ch. 2), followed by five chapters detailing the results of the individual excavations written by the respective supervisors (chs. 3–8), and individual chapters on the ceramic productions of the third and second millennium BCE (ch. 9), the lithics (ch. 10), medieval metal (ch. 11), and the ground stone industry (ch. 12). Six appendices are dedicated to scientific specialist studies and short reporting; an integrated bibliography and a biographic notice for the individual authors complete the volume.

Chapter 1 offers a thorough introduction to the intricacies of Bronze Age Oman and the inherent bias of research as a background to the project. Oman is long known to have played a major role within the network of third millennium BCE urban cultures bordering the Persian Gulf and Arabian Sea and the respective hinterlands that Gregory Possehl baptised the *Middle Asian Interaction Sphere* (MAIS; see Fig. 1.1). Located at halfway distance between the riverine civilisations of Mesopotamia and the Indus and identified with the copper-rich lands of Magan in the Sumerian sources, the region engaged in close trade relations with the opposite coastal territories of Makran and the southern Indus, and supplied copper from its rich resources to the Mesopotamian city states and the subsequent first territorial states of Akkad and Ur III. First interregional contacts via sea are attested in the fifth millennium BCE when Ubaid and Susiana-related ceramics appear on coastal sites along the Gulf. Again in the third millennium BCE, contacts are visible through ceramic imports and textual sources. However, a strong research bias flaws archaeological knowledge. This bias is rooted in (1) a focus on coastal sites; and (2) the fact that the cultural sequence of Oman has been mainly constructed on the basis of tomb inventories as so little is known of settlements. As tombs of the third and second millennium BCE in Oman are mainly monumental-size towers, these have been repeatedly re-used, thereby mingling and mixing original inventories, so that these sources have to be treated cautiously. Both problems are thoroughly addressed by the Bat project.

The oasis of Bat is today described in the UNESCO World Heritage list as “one of the most complete and well-preserved ensembles of settlements and necropolises from the 3<sup>rd</sup> millennium BC worldwide” and is considered a “fossilized Bronze Age landscape” with burial towers, settlements and workshops in a landscape thriving on irrigation agriculture.<sup>1</sup> First systematic investigations at the site were conducted by Karen

<sup>1</sup> <http://whc.unesco.org/en/list/434>, accessed 21 October 2017.

Frifelt between 1973 and 1990; since the 2000s, other teams have been invited to work at the site. The Philadelphia research project presented here began in 2006 and proceeded with detailed excavation and documentation of four burial towers and recording of another five towers and surface structures. Most towers proved to contain a more complex sequence than originally expected, with layers preceding the construction of the towers, followed by burials in the towers and subsequent building extensions and re-use, dating from the Hafit (3100–2800 BCE), Umm en Nar (2800–2000 BCE) and Wadi Suq (2000–1600 BCE) periods, but also with re-use in Medieval times. A first-ever attempt to corroborate the relative dates of the Bronze Age periodisation by radiocarbon samples is provided here in Appendix IV (pp. 299–301). The individual operation stratigraphies indicate that irrigated fields already existed in the valleys before the construction of the towers in the Hafit period (tower 1146, p. 46), and tower 1147, one of the earliest, allows us to observe an increasing monumentality of the structure, which begins as a mudbrick tower but later is embellished with stone (p. 82). For tower 1148, an experimental digital documentation is provided (ch. 5); the place was re-used late in its existence, possibly by pastoralists who left images picked onto the stone of the collapsed tower. Tower 1156 (ch. 6) was in use for more than a thousand years and formed part of a complex with settlement remains and a water management system. This site also yielded four firepits with residues of copper smelting.

Ceramic production is discussed at length in ch. 9 and reveals some interesting patterns. In Oman, pottery making is introduced late, only from the early third millennium BCE onwards. It was probably inspired by imported Mesopotamian pottery, which appears odd, as Mesopotamian imports make up only a minor portion of the finds, while alongside the local production the majority of imported ceramics seem to derive from the Indus region plus a few from Iran. The Iranian imports allow chronological correlations with the sequence from Shahr-e Sokhta, while the majority of the Indus region imports are the highly standardised “black-slipped jars”.

The study proceeded through first macroscopically defining fabrics and subsequently counting the materials from the excavated and stratified contexts; the authors are aware of the danger of obtaining skewed data from this approach, which was deemed, however, the only feasible one. As a result, it has become evident how uneven the distribution of specific ware types is within the individual towers; interestingly, the Indus component is, with 5–10% of the overall assemblage, quite high. This is an unexpected result and sets Bat apart from other Bronze Age sites in Oman such as Hili 8, where Indus imports only make up between 1 and 2 %; it is furthermore remarkable as it corroborates the importance of trade with the Indus area, despite the fact that Bat is a highland site about 100 km distant from the coast as the crow flies. Given the potential statistical flaws in the set of data, however, and acknowledging that the majority of Indus sherds belong to large black-slipped jars that upon breakage could have produced many more sherds than other forms, it remains to be established if this pattern can be considered accurate.

Although highly preliminary, the studies of lithics (ch. 10), metal (ch. 11) and ground stone (ch. 12) assemblages are valuable, as they represent the first stratified assemblages studied from any site in Oman. The study of metal is based on a total of 135 finds, deriving from the excavated towers and from the survey, that date from the early third millennium BCE to the Islamic period. A fair amount of the material is metal production debris, like copper prills, slag and crucible fragments; a few refined artefacts like a belt buckle (p. 231 Fig. 11.1, D) belong to the Islamic period re-use phase. The material was studied strictly from a typological perspective; no lab analysis of the material was carried out, which is regrettable, as it is difficult to distinguish in a macroscopic way between spilled copper prills and crushed pieces of ore. In particular, knowing that Oman is considered one of the major copper suppliers to ancient Mesopotamia, any data on element composition, trace elements and lead isotopes would be highly welcome; hopefully, a task for the future. What can be retained from the metal study are two main observations: (1) that copper working had already begun here in the early third millennium BCE Hafit period, surprisingly early when compared to other evidence for copper working from Oman; and (2) that the evidence is surprisingly meagre altogether, given the fact that Oman is such a well-known copper supplier to ancient West Asia from the later third millennium BCE.

In conclusion, the editors emphasise the necessity to investigate and understand the Bronze Age occupation of Oman “in its own right,” instead of treating the country merely as a stepping stone in between the

two major civilisations of Sumer and the Indus Valley. The oasis of Bat was settled from the late fourth millennium BCE, and the place thrived throughout the Bronze Age, despite its inland location, as is now evident. With its long sequence and the clear observations presented in this volume, Bat can serve as a model case for future investigations into the Bronze Age of Oman.

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Berit Hildebrandt and Carole Gillis (eds), *Silk: Trade and Exchange along the Silk Roads between Rome and China in Antiquity*. Oxford: Oxbow, 2017. Pp. 224, B&W and colour figures. ISBN 9781785702792 (Hardback).

There have been some remarkable textile survivals. While those interested in the ancient world will be aware of the miles of simple, tabby-woven linen found in the intact in the dry conditions of Egyptian burials, evidence for other textiles continues to grow, with discoveries from cold dry regions, or in zones of permafrost and in the anaerobic conditions of boggy wetlands, as well as desiccated cloth from within ancient salt mines. Each find brings a new range of examples that expands the geographical, temporal or technological knowhow of ancient craftswomen and men. As the title suggests, the eight chapters in *Silk: Trade and Exchange along the Silk Roads between Rome and China in Antiquity* have a clear focus. The book concerns key problems surrounding the origin of silk textiles, their subsequent history and the technological development of weaving. This highly valued commodity was traded along the ancient Silk Road and with it went manufacturing skills and broader, general knowledge about Rome in the west and China in the east.

Silk is produced by insects, more precisely worms of the silk moths, when they spin themselves into a cocoon from which they hatch as a moth (Hildebrandt, p. xi).

This statement launches the reader into the complexity of sericulture and the centuries of selective breeding to produce the optimum cocoon size and quality of thread unwound from it. Silk was probably harvested from non-cultivated cocoons during the third millennium BC in India and possibly in China (p. xi). Berit Hildebrandt, in the introduction, gives a brief overview of the silk and the line of trade spanning from the third century BC to the fifth century AD. At a glance, the map provided (p. x), clearly demonstrates the socio-political and geographic complexity of the region through which trade was conducted. Naturally, the Silk Road saw all manner of commodities exchanged and the ancient textual evidence, notably in Tacitus and Pliny, supplies some insights to the range of merchandise that changed hands.

Concerning the eastern end of the trade network, Liu Xinru's chapter covers two basic aspects: what the Chinese understood about Rome as a geo-political entity and the nature of the silk commodities traded between the two regions. Xinru presents a fascinating account of the earliest evidence for western societies in the Han Empire, gleaned from Chinese texts. The impact of Alexander's foray eastward resulted in a number of cities which took his name and the influence of Hellenistic culture echoed through the region. Matching geographic references in texts, however, with known settlements is fraught with difficulties. When Rome came to the attention of Chinese historians and officials, Xinru argues, it did so through the filter of intermediaries. What the Han court took to be Roman is likely to have been influenced by contact with Greek traders, perhaps focused on the mercantile hub of Alexandria on the Nile Delta (p. 2).

Written accounts both Chinese and Roman offer contradictory views on the nature of the silk commodities sought after by the Roman markets. Roman women, on the one hand, wanted fine translucent, gauze silk cloth and yet, according to Han sources, Roman merchants went so far as to unravel silk textiles for the thread, which could then only be used for coarser fabric. This misunderstanding, Xinru suggested, grew from the distortion of knowledge transmission through the multiple interest groups through whose

hands such commodities passed. As the Levant and associated trading centres were thought of as 'Rome', products made there, among them silk and other textiles, were considered of Roman manufacture in Chinese circles.

Mark Kenoyer takes the reader deeper into prehistory (from *c.* 9000 BC), in order to trace the development of and trade in fabrics. The gamut of textile types he surveys (cotton, wool, hemp, jute, flax and silk) is wide; such overviews can be very useful, however, for identifying geographically and temporally dispersed evidence and for the bibliographic documentation of such finds. Kenoyer draws on the characteristic range of textile evidence available: fabric impressions on pottery, mineralised threads preserved through contact with corroded metalwork and artistic representations of cloth. Against this backdrop, wild silk textiles and fibres from Harappa fall within the chronological range of 2450–1900 BC.

While Kenoyer's focus is on the textiles evidence largely from the Indus valley through to southwest China, it might be worth noting that evidence for thread production has been pushed back considerably through the study of non-pollen palynomorphs (NPPs) in the Caucasus, an area on the northern fringe of the Silk Road, as identified in the volume. Using such data, Eliso Kvavadze and her colleagues have identified wild flax fibres, some spun, in Upper Palaeolithic contexts (*c.* 30,000 BC) in Dzudzuana Cave in Georgia. The treatment of the fibres indicates the manufacture of cord, basketry, cloth and dyeing of the fibres ("yellow, red, blue, violet, black, brown, green, and khaki").<sup>1</sup> In reality, NPP research has pushed the boundaries of our understanding concerning textiles production and such technology holds great potential in silk-producing regions, in the absence of substantial textile survivals, for solving some of the remaining questions. Such problems concern wild versus cultivated varieties, or primary and secondary weaving of threads, issues which are discussed in a few studies in the volume.

Through a detailed analysis of the English word, 'silk', Adam Hyllested traces the word's migration through northern Europe to "a starting point in East Asia" (p. 28). In his etymological tour, he points to the entanglement of the term such that it came to refer to 'silk men', in a hazy and general reference to the populations of Central Asia, the producers of silk in the early first millennium AD. Alanic westward migrations are thought to have carried their "shape of the word [i.e. *\*silka-*]" with them into Europe where it appears in Old Norse [*silki*].

Silk was likely to have been introduced to the west in the first century BC, and during Roman times, local production was seen as a way to circumvent Persian traders in particular. Hilderbrandt sifts through the textual evidence for silk in Greek and Latin sources—what was known of its cultivation or harvesting, whether erroneous or otherwise, the mechanisms and routes of trade, the *sericarii* (people whose livelihood came from the silk industry), and the high prices the commodity attracted.

Two essays (chapters 5 and 6) remind us that colour and design can embody greater meaning. After presenting a range of actual textile fragments and their various design techniques, set against the prominent trade centres through which such textiles passed in antiquity (Dura Europos, Palmyra, Antinoë and Panoopolis), Thelma Thomas delves into the significance and symbolic qualities of textiles in the Late Antique and Byzantine periods. The discussion is fascinating, drawing on the sixth-century work of Cosmas Indicopleustes, *The Christian Topography*, and painted icon and mosaic traditions. The author teases out such notions as "prosperity and luxury, cosmos and commerce in Late Antique conceptual world constructions" (p. 74). Silk embodied aspects of earthly prosperity originating from the edges of the known world while also pointing to Paradise, which was thought to lay beyond.

Inscribed silk remnants from a Niya tomb within the Jingjue Kingdom (on the southern route bordering the Taklamakan Desert in the Xinjiang territory, northwest China) held a remarkably well-preserved, Caucasian male interment. The phrase, "The conjunction of the five planets in the East would benefit the Middle Kingdom," as well auspicious decorative motifs, which were woven into his cloth garments, Lillian Lan-ying Tseng argues, relate to the establishment of the Han Empire (pp. 82–83). Rather than a random

<sup>1</sup> Kvavadze 2009, p. 1359, "Radiocarbon dates demonstrate that Dzudzuana Cave was inhabited in the Upper Paleolithic period, during 32 to 26 <sup>14</sup>C years before the present (yr B.P.) [36 to 31 thousand years ago (ka); unit D]" and "unit D produced fibres of flax...some spun...and dyed...the colors are mostly black-to-gray and turquoise."

use of woven and inscribed cloth by an illiterate individual, the fabric and other finds suggests that the tomb held a Jingjue ruler ('king') and that through such inscriptions, he displayed his allegiances to the Han Empire, within which his kingdom fell.

Hundreds of artefacts excavated from the Yingpan burial grounds date to the third to fourth centuries AD, spanning the Han and Jin dynasties. In the dry conditions of the site, clothing that was preserved represents a range of textiles and manufacturing techniques used to produce them. A basic question drove research into the nature of the silk items: "whether the silk fiber used for the spun silk textiles from Yingpan is domestic, wild or unravelled from Central Chinese silk" (p. 96). Thereafter follows Zhao Feng's detailed analysis of spun jin-silk ribbon, remnants of tabby, damask, taqueté and floss. Unravelling cloth for the threads is a practice mentioned in a few chapters in the volume, and it was interesting to read why and how it was carried out; dominant local tastes for certain patterns and designs, outside of the main Chinese production centres, may have driven the process.

The technicalities of loom construction and use is discussed by Zhao Feng. This is a reasonably technical account, which spans what is meant by ancient Chinese references to intricate, and often polychrome weaves. Feng outlines the nature of complex looms in China and in the Mediterranean regions, concluding that the two zones developed independently their own textile technologies, but that there was cross-cultural borrowing of designs.

The volume ends with a dedication to the memory of Irene Lee Good, whose career is outlined in a short appreciation by Robert E. Murowchick, Angela Sheng and Kaoru Ueda.

This volume will appeal to the specialist focused on ancient textiles, but there is more on offer here. The lines of communication and extent of knowledge about and between the cultures at the eastern and western limits of the Silk Road and in the many regions that acted as intermediaries are topics that will have wider significance to scholars and students.

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Gregorio del Olmo Lete, *Studies in Ugaritic Linguistics: Selected Papers*. AOAT 432. Münster: Ugarit-Verlag, 2017. Pp. 502. ISBN 978-3-86835-183-5.

This handsome collection of articles, dating from 1975 until the present, provides much-welcomed easy access to studies by the author that have appeared in various periodicals and collected studies. Complete with a list of the original publications and their sources (pp. 467–469) followed by indices that list Divine Names and Epithets, Personal Names, Authors (outside bibl. references), Place Names, Words, Subjects and Texts (pp. 471–502), the author begins with a short discussion on the Current State of Ugaritic Studies as things stood in 2014 (pp. 3–8), followed by the announcement of The International Group for Comparative Semitics (pp. 9–11).

The studies contained in the volume are broken down into sections: Lexicography (pp. 15–220), Texts (pp. 223–373), Themes (pp. 377–448) and a Phoenician Appendix (pp. 451–465). Chronological order is not applied to the collection, with thematic coherence at work.

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Themes: The Cultic Literature of Ugarit. Hermeneutical Issues and Their Application (pp. 377–387); Typologie et syntaxe des rituels ugaritiques (pp. 389–406); The 'Divine' Names of the Ugaritic Kings (pp. 407–420); Royal Aspects of the Ugaritic Cult (pp. 421–431); From Baal to Yahweh (pp. 433–436); Littérature et pouvoir royal à Ougarit. Sens politique de la littérature d'Ougarit (pp. 437–448).

Phoenician Appendix: Les inscriptions puniques votives. Suggestions d'interprétation (pp. 451–456); Phén. *rpt*, acc. *urpatu(m)* et le groupe lexical /'ḡ-r-b:p/ (pp. 457–462); KTMW and His 'Funerary Chapel' (pp. 463–465).

Robert ALLAN, Lyon

Elitzur A. Bar-Asher Siegal, *Introduction to the Grammar of Jewish Babylonian Aramaic*, 2nd revised and extended edition. LOS III: Aramaic Volume 3. Münster: Ugarit-Verlag, 2016. Pp. 388. ISBN 978-3-86835-177-4.

The author begins with a concise history of the dialect that is informative and relevant for the student of the grammar. He deals effectively with the culture of studies within this particular dialect.

The grammar. I enjoyed going through it and doing the exercises very much. A lucid and approachable grammar.

After four chapters which discuss Orthographic Issues (ch. 1), Apocopation of Final Consonants (ch. 2), Consonant Changes (ch. 3) and Apocopation of Final Vowels (ch. 4), the grammar begins: Chapter 5, Morphology of the strong verb: Introduction to the verbal system; Chapter 6, Weak verbs; Chapter 7, The verb *הר"י* "to be"; Chapter 8, Relationship between the stems; Chapter 9, Accusative pronominal suffixes; Chapter 10, Dependent clauses; Chapter 11, Infinitive clauses. A glossary of words for linguistic terminology is included, as is also a 30-page Vocabulary and Exercises section. Verbal Paradigms and a Bibliography complete the volume.

Robert ALLAN, Lyon

Stephen C. Russell, *The King and the Land: A Geography of Royal Power in the Biblical World*. Oxford: Oxford University Press, 2017.

Russell's study is an engaging piece of scholarship that articulates heretofore unrecognized or unexploited ways that ancient Near Eastern kings—in this instance, biblical kings—used space to display legitimate royal power. In addition to royal ideology and monumental reshaping of the landscape through the construction of fortifications, temples, and palaces, the founding of cities, the erection of monuments, and the expansion of territory, Russell shows that kings also utilized socially-produced space as a means to establish, express, and/or further their political power. In particular, kings dedicated land to the gods, decommissioned temples, used town gates as a space for asserting their power over towns, and built and maintained water systems (108–109). Russell looks at five case studies to highlight this spatial component of the expression of royal power: Solomon, David, Jehu, Absalom, and Hezekiah, respectively. The first three deal with royal shaping of cultic space, the fourth with the centralization of power within socially acceptable boundaries at the local, town level, and the last deals with royal construction.

The first chapter on Solomon's construction of the Temple in Jerusalem discusses how Solomon's utilization of foreign elements for the Temple of Yahweh, and the biblical author's depiction of Solomon's use of foreign elements, are not mere passing references but part of a specific spatial strategy meant to highlight Solomon's management of international relations. Interwoven in this chapter is Russell's methodology, including a discussion of space and power. He draws heavily upon the work of Henri Lefebvre, who notes that "(social) space is a (social) product" (cited p. 5), and on the work of James Scott, Michael Mann, Anthony Giddens, and Richard Blanton (among many others), in order to articulate the "complex and contradictory interactions between dominant and subordinate actors" and how spatial insights can inform theories of power (6).

Chapter Two focuses on David's dedication of a threshing floor to YHWH in 2 Sam 24. By purchasing Araunah's threshing floor and his cattle, David is, according to Russell, securing land free from legal claims that will be set aside for cultic use. Such dedication to YHWH is juxtaposed in 2 Sam 24 with David's census, resulting pestilence, and expiatory sacrifice to stop the pestilence. Russell articulates why these latter three themes are combined and how they serve to portray David not only as an ideal king, but also as a flawed man who has a special relationship with his god. As such, 2 Sam 24 is a microcosm of the whole book of Samuel, which highlights these same traits for David, and at the same time legitimizes his kingship by showing his shrewdness in dealing with man and god alike.

Chapter Three deals with Jehu's decommissioning of the temple of Baal in Shechem, recorded in 2 Kgs 10:18–28. Russell provides a detailed summary of previous scholarship that has noted both unity and tension in the passage, and ultimately argues against literary unity through a robust discussion of repetitions, contradictions, the language of ritual violence and assembly in the pericope. He parcels out two threads: a Layer A, which has affinities to the Priestly tradition, and a Layer B, which has affinities to the Deuteronomistic tradition. The articulation of these two layers, which are then viewed in light of the broader arc of Jehu's coup in 2 Kgs 9–10, lead Russell to state that "an earlier independent account of Jehu's destruction of a single temple of Baal" has been reworked into "a story about the national religious purge of Baalism" (41). The more dynamic editorial history that Russell espouses illuminates why the Deuteronomistic History has such a positive view of the House of Jehu.

Chapter Four addresses Absalom's use of the city gate to foment rebellion in 2 Sam 15:1–6 by his appeal to distributed structures of power. After a discussion of the function of city gates according to the biblical sources, Russell considers the role of gates in Mesopotamia and the Northern Levant. In texts from these regions, the gate is depicted as both a place where centralized monarchic authority was reified, and as a place where collective structures of governance aligned on "traditional authority" are expressed (73). Gates serve as ideologically liminal realms between power structures in much the same way they are actual physical places of liminality. And as they are places in which judicial and civic processes take place, they can be places wherein collective and individual power structures were worked together or were used against each other. In the case of Absalom, the gate served the latter purpose as he attempted to rally support for his rebellion amongst people coming to Jerusalem's gate(s) for justice.

Chapter Five concentrates on Hezekiah's manipulation of water as recorded in 2 Chr 32:2–4, 30 and 2 Kgs 20:20. Through a detailed discussion of the redactional history of these passages, and in light of comparative material from the ancient Near East, Russell builds a compelling case for the lack of dependence between 2 Chr 32:2–4 and 2 Kgs 20:20. Instead, he views these passages through the lens of ancient Near Eastern royal ideology, which highlights both a king's abundant provision for their people through the building or maintenance of water supply systems (2 Kgs 20:20), and claims that kings were successful in battle because they reshaped a water system (2 Chr 32:2–4). Russell sees 2 Chr 32:30 as a late interpretive gloss that draws together the separate activities recorded in 2 Kgs 20:20 and 2 Chr 32:2–4.

Throughout this study, Russell has shown how biblical (and Near Eastern) kings did not have autocratic power free of social constraint, but rather navigated their roles and exercised their political power over a particular space and within the bounds of established social norms. With heavy reliance upon ancient Near Eastern parallels, he has established a solid context for interpreting the biblical texts and ancient Israel's understanding of power dynamics. Extensive endnotes (175 pages to 109 of text) filled with extensive quotes from numerous primary sources nicely bolster Russell's main arguments. And while the endnotes lead into detailed discussions that scholars will find useful, Russell's articulate summaries and explanations of textual issues and the history of scholarship on various topics makes the content accessible to less experienced readers. This volume is packed with many fruitful insights and intriguing interpretations that make this work a must read for anyone interested in the dynamics of power in ancient Israel and in text-critical issues in the Hebrew Bible.

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Brian Janeway, *Sea Peoples of the Northern Levant? Aegean-Style Pottery from Early Iron Age Tell Tayinat*. Studies in the Archaeology and History of the Levant 7, Harvard Semitic Museum publications. Winona Lake, IN: Eisenbrauns, 2017. Pp. 207, 7 figs, 20 tables, 24 plates. ISBN 9781575069500 (Hardback). Classification: LCC DS156.T39 J36 2015.

Brian Janeway's presentation of the "Aegean-style" pottery from the principal regional site of Tell Tayinat in the Amuk Valley of the northern Levant is an important contribution, which directly addresses a gap in our understanding of the end of the Late Bronze Age and early Iron Age. Thus far, Janeway's work represents the only published analysis of a stratified assemblage of early Iron Age pottery from this region, and will provide an essential point of comparison for future studies at Tell Tayinat, in the Amuk Valley, and in the eastern Mediterranean.

The book finds itself published against a rapidly expanding backdrop of scholarship concerning the end of the Late Bronze Age and the early Iron Age in the eastern Mediterranean. Research on the "Philistines" has recently seen stimulating contributions that have provided new ways of thinking or (at the very least) forced a reconsideration of old ideas.<sup>1</sup> Broadly speaking, the "Sea People phenomenon" continues to fascinate and challenge the limits of interpretative frameworks.<sup>2</sup> High-quality and detailed publications of major sites, particularly in the southern Levant, are now occurring with regularity. Major publications from Tel Miqne-Ekron, Tel es-Safi/Gath, and Ashkelon have all occurred in the last decade or so.<sup>3</sup> Gitin's encyclopaedic *The Ancient Pottery of Israel and its Neighbors* also fits into this context, representing a monumental achievement, enabled by the sheer quantity of scholarship in recent years and the hard work of regional pottery experts.<sup>4</sup>

Janeway's book is both benefitted and harmed by this evolving scholarly landscape. The book is timely as a result but, while it was published in 2017, no references to scholarship beyond 2015 are present. Similarly, important recent contributions have not been able to make detailed reference to the Tell Tayinat assemblage. This is understandable (and unlucky), and the reader must keep in mind the important advancements in the following years when attempting to situate Janeway's scholarship and discussion in their proper context.

The book is divided into five chapters. Chapter 1 serves as an introduction to the study, and a detailed overview of scholarship concerning both "Late Helladic IIIC" and the ongoing research in the northern Levant and Amuk Valley. Chapters 2 and 3 are concerned with surveys of early Iron Age sites in Anatolia/Cilicia, Syria and Phoenicia, Philistia, Cyprus, and then of the Amuk Valley itself as they relate to the Tell Tayinat LH IIIC material. Chapter 4 is the bulk of the book, presenting relevant stratigraphy and the Tell Tayinat LH IIIC pottery alongside exhaustive comparative scholarship. Finally, Chapter 5 is short and more interpretative, attempting to place the observations of the Tell Tayinat material into broader debates concerning the early Iron Age.

Within the first chapter, Janeway provides a thorough overview of the end of the Late Bronze Age and the early Iron Age in the eastern Mediterranean (including summary treatments of the different interpretive frameworks concerning the Sea People phenomenon). A strength of this chapter is in the critical and balanced treatment of stylistic analysis as a methodology for constructing pottery typologies (with a particular focus on the legacy of seminal works by Furumark and Mountjoy), and the resulting justifications for Janeway's own methodological choices. In terms of associating Helladic stylistic frameworks with northern Levantine assemblages, Janeway is very cognizant of the problems with applying comparisons over large distances and of the predominantly mortuary contexts from which many of the foundational Helladic typologies were originally constructed. He also points out the inconsistencies in terminology related to "LH IIIC type pottery" in the Levant, a problem that plagues the region as whole, but especially Philistia. Both here and in Chapter 4, Janeway should be praised for explicitly laying out the thinking behind his methodology, as this enables readers to make their own informed judgements concerning the strengths and weaknesses of his analysis.

<sup>1</sup> See Maeir and Hitchcock 2017 for a summary and references.

<sup>2</sup> Fischer and B rge 2017.

<sup>3</sup> Dothan *et al.* 2016, Meehl *et al.* 2006 (Tel Miqne-Ekron); Maeir 2012 (Tel es-Safi/Gath); Dothan and Ben-Shlomo 2005 (Ashkelon).

<sup>4</sup> Gitin 2015.

By using the terms “LH IIIC” and “Aegean-style” throughout the book, Janeway claims not to imply “broader cultural conclusions” nor “sequence or chronology” (though, if not these, it is hard to imagine what *is* being implied with the use of such loaded terms). This reviewer found it rather problematic to relegate these terminological debates to mere semantics. Evidently, in the end, Janeway did as well. In his analysis of the ceramic assemblage (treated below), identifying which pieces were “Aegean-style”, which were “local”, and which were “hybrid” was a significant problem within the classification methodology of some shapes. One wonders if this whole issue stems directly from the initial choice to try to separate out so-called “Aegean-style” pieces from the rest of the Tell Tayinat pottery and to treat them as separate rather than as a part of the assemblage as a whole. It also betrays a lack of engagement with transcultural interpretative frameworks that have increasingly been applied to the region and period in recent years.

Chapter 2 presents a survey of contemporary sites in the wider region that highlights the specific findings, stratigraphy and ceramic phasings that relate directly to the Tell Tayinat material. Chapter 3 is dedicated to the Amuk Valley and the sites related to the Syrian-Hittite Expedition, and then, finally, the Tell Tayinat Archaeological Project itself. While exhaustive and thorough (Janeway’s scholarship is excellent), the structure of these sections reads very much like literature review and methodology chapters lifted from a dissertation. There is very little new here for the specialist but, for the layperson, these sections are extremely dense. Nevertheless, they do serve as excellent summaries with up-to-date bibliographies, and they situate Tell Tayinat in a broader geographical context. This is very much needed, as the publication record of the region is thus far extremely poor.

Chapter 4 presents the relevant stratigraphy from Tell Tayinat and the “LH IIIC” ceramic assemblage. The stratigraphy comes from two  $5 \times 10$  m squares (G4.55 and G4.56). While G4.56 was evidently heavily disturbed by extensive later building activity associated with an Iron II temple, adjacent square G4.55 revealed complex Iron I stratigraphy from several superimposed architectural sub-phases. Various surfaces and walls were punctured by rather extensive pitting activity, according to Janeway’s description and associated diagrams. The majority of Janeway’s ceramic assemblage comes from G4.55 and, due to the challenging stratigraphy (and the extensive risk of contamination within the ceramic assemblage), it is confusing as to why no consideration or discussion of assemblage homogeneity appears here.

The assemblage considered represents a very small sample (385 sherds) which is, according to Janeway, “representative”. Considering that the following analysis is dedicated exclusively to particular “Aegean” shapes (Deep Bowls, Shallow Angular Bowls, One-Handled Conical Bowls, Kraters [which, Janeway admits, contains both local and “Aegean-style” kraters due to difficulties in identification], “Aegean-style” amphorae and jars, and several miscellaneous forms), and that clearly the majority of the pottery has not been included, it is hard to understand what “representative” means. Clearly the sample has been heavily selected, and primarily comes from only one focal point on the site, with an associated risk of functional or spatial biases in the data.

Little consideration seems to have been given to issues of quantification. Janeway appears to rely exclusively on raw counts alone, and it is unclear if these were done before or after mending. While a common methodology, counts are notoriously unreliable as a real measure of relative frequency and they should always be paired with a more reliable method such as Minimum Number of Individuals (MNIs), Estimated Vessel Equivalents (EVEs), or (at the very least) weights.<sup>5</sup> In addition to this, the raw data is poorly presented with very few charts and tables that give an overall picture of any part of the sample. This issue extends to the inconsistent presentation of the frequency for each shape, feature, or motif within each stratigraphic sub-phase. Often this information is neglected in the text.

When data is illustrated, an assessment of its significance is hampered by ambiguities. For example, in Table 10 (p. 69), the relative frequency of different krater rim types is presented in a pie chart. Besides the issue of the small sample size (46 rim sherds), do all of these rim types come from the same stratigraphic sub-phase? Has differential preservation been accounted for (that is, is one rim with 5% preservation considered equivalent to one rim with 20% preservation)? In a discussion concerning the four “Aegean-style cooking pots” in the sample, Janeway states that these represent an “inconsequential portion of the overall cooking pot assemblage – less than 5% of all diagnostic rims”; however, included in this count are the

<sup>5</sup> See Verdan *et al.* 2011.

“only complete cookware vessels of any type recovered thus far.” In such a small assemblage, one is left wondering whether a more accurate method of quantification would have significantly changed this picture, and thus the resulting discussion.

These broader problems are coupled with smaller issues with poor publishing quality. Pottery illustrations are located in plates at the end of the book rather than spliced between the extensive text under each shape, necessitating a lot of paging back and forth to follow along with the discussion. The accompanying catalogue is limited – plate number, registration number, field phase, feature type, morphological sub-type, and motif are the only fields included. There is no mention of dimensions, degrees of preservation, colour measurements, firing assessments, and macro- or micro-fabrics (though Janeway does occasionally discuss different types of temper in some sections of his text). No photographs (colour or otherwise) appear. The few statistical charts are of poor quality, often featuring unclear labelling of axes and greyscale tones that are difficult to differentiate from each other. Finally, print quality (and typographical) issues are sprinkled throughout, and some blurring occurs on several figures.

The book is strongest in the stylistic analysis of the sample. Each shape, morphological feature, and motif is given a thorough treatment, and Janeway has gone to great lengths to include up-to-date and detailed comparanda from throughout the eastern Mediterranean. A case could be made that more thought should have been given to structuring this section, as brief descriptions of elements from the Tell Tayinat assemblage are often overwhelmed by pages of related (sometimes tangential) discussion. A better approach might have been to clearly separate the discussion from the description. The accompanying pottery illustrations (all located at the back of the book) are of high quality, and they adhere to a consistent standard. These illustrations (arranged by phase and shape) will prove to be immensely useful for future comparative studies and are the most valuable resource presented in the book.

The final, concluding chapter attempts to place the Tell Tayinat LH IIIC assemblage within the major debates that continue to evolve within cutting-edge scholarship. In terms of interpretative paradigms, Janeway rejects the socioeconomic or mercantile theory relating to the appearance of Aegean-style elements in Levantine assemblages in favour of a likely direct Cypriot and/or Cilicia-linked migration model. Regardless of either theory's merits, there is very little engagement with more recent complex interpretative frameworks and readers should keep the discussions over the last several years in mind.<sup>6</sup>

Overall, Janeway's contribution remains an important piece of scholarship that provides a much-needed window into the early Iron Age of a very poorly understood region. Future analyses in both the immediate and broader region will rely on Tell Tayinat material for comparative discussions, and Janeway's stylistic analyses and comparanda are wide-ranging in scope.

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<sup>6</sup> Among others, see contributions in Fisher and Bürge 2017; Hitchcock 2011; Hitchcock and Maeir 2013; Maeir and Hitchcock 2017; Stockhammer 2013. In particular, somewhat contrasting with Janeway's views are conclusions from nearby Cilicia at Kinet Höyük (Lehmann 2017).



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Ali Çiğçi, *The Socio-Economic Organisation of the Urartian Kingdom*. Culture and History of the Ancient Near East 89. Leiden: Brill, 2017. Pp. 354. ISBN 9789004347588.

Over the past quarter of a century, a growing number of research projects and publications on the Iron Age in the Near East have provided substantial information on the region’s political history and cultural processes. Anatolia and its neighbours have been especially well covered, although the eastern part of Anatolia has been somewhat neglected in comparison to the west.

The Iron Age kingdom of Urartu (Biainili) has long attracted scholarly attention, particularly since the 20th century. Books on the kingdom, however, are relatively few. Recently, two significant edited volumes, comprising contributions by numerous archaeologists and philologists, have appeared. One was *Urartu: Transformation in the East* (2011) and the other, *Biainili-Urartu* (2012)<sup>1</sup>. As the decade draws toward its end, Ali Çifçi has published the volume here under review, based on his PhD dissertation.

Çifçi's work is a good contribution for those looking for an outline of the social and economic organisation of the Urartian Kingdom. It is a carefully researched and well-organised compendium of Urartian culture in general. The writing is fluent and easy to understand.

The book contains three main chapters, which include sub-sections on both archaeological and textual information connected to the socio-economic structure of the Urartian Kingdom. Each chapter begins with an introduction that explains what the author intends to discuss, and lists his main sources of evidence.

The first chapter provides a fine point of entry into the current status of Urartian archaeology by reviewing the archaeological data, Urartian and Assyrian texts, and ethnographic observations and physical geography (pp. 1–26). Although I found the use of terminology generally good, some designations, such as 'united kingdom' or 'tribe', do not serve well to explain the real sociological background to the region. The author summarises investigations of Urartu in terms of different scholarly streams. It is true that socio-economic structures have not yet been the subject of a systematic research publication, as the author notes. I believe that a PhD dissertation on Urartu and its economic structure was completed by H. Sağlamtimur, but is unpublished and yet to reach a wide audience.<sup>2</sup>

Çifçi divides the socio-economic development of the Urartian Kingdom into three periods, which he calls an 'early expansionist period', a 'crisis period' and, lastly, a 'restructuring and reforming period', although one cannot trace this division in the chapter(s) that follow.

In the second chapter, which deals with economic resources, the author compiles textual and archaeological evidence for agriculture (pp. 28–90), animal husbandry (pp. 91–118) and metallurgy (pp. 119–156). Çifçi uses contemporary Assyrian data to reconstruct the Urartian period. It is clear that agricultural activities were quite important for the peoples of the high plateaus of Eastern Anatolia. Eastern Anatolia is formed by high mountains and has very few cultivated areas. Harsh climate conditions forced local groups to develop new agricultural techniques, which also involved irrigation systems. The author describes this situation well, and also felicitously identifies climate fluctuations near Lake Van by analysing pollen data. According to the results, around 850 BC the region had a warm and dry climate with low humidity. One might also have expected the author to discuss whether or not these topographical and climatic conditions forced small polities to act together under a central administration, facilitating new agricultural areas and irrigation systems to combat the difficult growing conditions, resulting in the foundation of a kingdom. The author does give a very sound interpretation based on a comparison of agricultural developments in ancient and modern times, using ethnoarchaeological data. In addition, he seeks out information on agriculture areas and accomplishments in Van Basin, west of Gökçe (Sevan) Lake, and in northwestern Iran during the 19th century.

Also in Chapter 2, arable crops such as barley are discussed, with reference to archaeobotanical studies on barley brewing. Indeed, brewery basins for beer were one of the most interesting archaeological finds indicating beer production in Urartu. The author touches on the example from Karmir-blur, but not the one from Ayanis, which was published by A. Çilingiroğlu.<sup>3</sup> Evidence from Urartian and Assyrian texts (only Sargon II) of agrarian deeds, also supported by tables and maps, are very informative. When it comes to the archaeological data, Çifçi correctly deduces that storage facilities were much bigger in seventh-century fortresses, such as Ayanis, Bastam, Kef or Karmir-blur, than in eighth-century ones; this is why C. Burney called the fortresses built in the seventh century "storage towns."<sup>4</sup>

Çifçi next reviews a collection of very useful information on modern animal husbandry in the region, and a range of textual evidence for animal husbandry and horse-breeding practices in the past. He focuses

<sup>1</sup> Köroğlu and Konyar 2011; Kroll *et al.* 2012.

<sup>2</sup> Sağlamtimur 2001.

<sup>3</sup> Çilingiroğlu 2011, p. 355.

<sup>4</sup> Burney 1977, p. 1.

especially on horses, horse-breeding, and horse-riding regions such as Sangibute, Hubuškia, Ushkia, Diauehi, Etiuni and Mana, reflecting the Urartian and Assyrian texts. The following section considers archaeological evidence for animals, then deals with the role of the animal in Urartian religions. The author has collected anthropological and archaeological reports on the bones of domesticated and wild animals, especially from Bastam, Karmir-blur, Yukarı Anzaf, Toprakkale, Armavir, Kayalidere, Karagündüz, Horom, and Yoncatepe. Though much of what we know about Urartian religion and gods is related to rituals and related sacrificial ceremonies, it may not be so simple to determine from the archaeological evidence what the nature of those rituals was, or to which gods the animals were sacrificed. Çifçi restricts himself to only a few principal archaeological and textual sources to explain these matters, which may result in an incomplete picture of animal sacrifice in the Urartian religion. Although he gives helpful information about the occasions on which Urartians sacrificed animals, more evidence is still required to clarify certain aspects of where and in what manner the sacrifices were performed, what the rules were, why kid or goat sacrifices were made only at the beginning of ceremonies and why they were given this priority.<sup>5</sup>

When it comes to metallurgy, Çifçi presents relatively detailed information from the Early Iron Age up to the end of the kingdom. In this section, he correctly uses the term ‘principalities’ instead of ‘tribes’ for Uruatri and Nairi as political entities during Early Iron Age eastern Anatolia. He provides important information on iron, copper and tin ores and their significance for Urartu. He also reserves a large section for bronze as a Cu-based metal. There are numerous relevant archaeological finds, as well as textual evidence, about metal objects from both Assyria and Urartu. Urartian fortresses and necropolises have yielded large quantities of bronze artefacts such as helmets, quivers, shields, arrowheads and spearheads, swords, belts, nails, vessels, cauldrons, horse harnesses, plaques, cylinders, disks, rings, and more. Although some of the items may be considered everyday utensils — such as cauldrons, vessels and cups, or equipment for war — such as arrowheads, shields, et cetera, most of these artefacts must be votive offerings to the god Haldi, judging from their contexts in temples and the inscriptions they display. When the author differentiates between ‘votive weapons’ and ‘real weapons’, he suggests clear-cut manufacturing groups: the first group among these bronze products is votive objects, the second is comprised of weaponry, and the last is everyday items. Before suggesting such divisions, however, I would propose further refinements, taking into account, for example, what is votive and what is not, and what differentiates objects that have the exact same shapes and employ the same production techniques, while some bear inscriptions and some do not.<sup>6</sup>

Chapter 2 also includes an overview of the trade networks used by Urartian and other Near Eastern merchants (pp. 156–169), based on an analysis of written and archaeological evidence, and considers the overall importance of trade to the Urartian economy. A general historical background is provided by describing the administration and status of trade in Near Eastern cultures from the Middle Bronze Age until the Early Iron Age. As we understand from the political history of Urartu, the kingdom’s military interventions were shaped by the trade routes north and south. The author reviews Black Sea trade via Trapezus or Sinope and Urartu’s involvement in it, as well as the role of southern trade centres such as Al-Mina in Antakya and Carchemish in Gaziantep, and the link between Syria and Anatolia. The major events affecting the trade activities of Urartu are another focal point of the author.

The production of textiles, carpentry and pottery is evaluated in the last section of this economic resources chapter (pp. 169–186), mainly based on archaeological and iconographic data. Production of these crafts and the techniques involved is relatively hard to trace for Urartu, as production areas are not yet well understood. For textiles, we have visual and textual evidence of garments. I know that the author himself thoroughly studied and collected materials on textiles in Urartu, and would have expected him to include evidence from his own study,<sup>7</sup> as well as the more recent work of B. Gökçe on Urartian cloths.<sup>8</sup> Nevertheless, the author reviews a range of interesting evidentiary information on carpentry, and pottery in particular, and makes some suggestions about production techniques and workshops.

<sup>5</sup> Batmaz 2013.

<sup>6</sup> See for further information Batmaz 2015.

<sup>7</sup> Çifçi 2012.

<sup>8</sup> Gökçe 2016.

Administrative organisation and divisions in the Urartian Kingdom are the subject of Chapter 3 (pp. 187–292). In this chapter the author also focuses on the emergence of different types of buildings, such as URUs, É.GALs, KÁ/Šeištili, *susi*, É.BÁRAAs, and more. In this context, as the author states, the significance and role of Tušpa are undeniable. Çifçi discusses provincial and major citadels within Urartian territory, including regional differences, as well as reviewing general features, such as fortifications, masonry, and other architecture. Regarding fortification walls, there are two publications to be discussed here. One is W. Kleiss's classifications of fortifications, which Çifçi does take into account. Basically, Kleiss classified defensive walls on the basis of chronology: an earlier style of the eighth century and a later style of the seventh century for Iran. I would suggest also taking into consideration fortresses in eastern Anatolia, as studied in detail by A. Çilingiroğlu. Çilingiroğlu classified fortifications according to techniques: Cyclopean, Classical and Uçkale.<sup>9</sup>

The army, warfare and spoils of war (pp. 240–272) were vital to the economic development of the Urartian Kingdom, as the author clearly acknowledges, dedicating a section to these concepts. Çifçi reviews the army and its role in gaining booty and tribute, which formed part of the kingdom's income. The army of Urartu has been the topic of several recent articles, which discuss its organisation,<sup>10</sup> the chariotry,<sup>11</sup> and the army's development over time.<sup>12</sup> It would also be fitting to focus on the contribution of mass deportees to forming the Urartian army and achieving its economic results; however, two studies on deportation in Urartu seem to have been ignored.<sup>13</sup>

In the next section of Chapter 3, the concept of monarchy is discussed (pp. 273–297). The author focuses on the Monarch-Haldi relationship, and the issue of royal succession, as well as the matter of royal titles such as 'MAN DAN-NU' 'mighty king', 'MAN *alsuini*' (also transcribed as LUGAL) 'great king', 'MAN KUR.KUR' (MAN <sup>KUR</sup>*šurae*) 'king of the lands/countries', 'MAN MAN<sup>MES</sup>-ue' 'king of kings', '*alusi* <sup>URU</sup>*tušpa* URU' 'lord of the city of Tušpa' and 'MAN <sup>KUR</sup>*biainauē*' 'king of Biainili' and the names of the king's officials, such as <sup>LÚ</sup>NA4.DIB, <sup>LÚ</sup>NIG.ŠID, <sup>LÚ</sup>E.GAL, <sup>LÚ</sup>IGI, <sup>LÚ</sup>*ašuli*, <sup>LÚ</sup>*turtānu* and <sup>LÚ</sup>EN.NAM, <sup>LÚ</sup>A.NIN-li, and more. Royal succession in Urartu depended on heredity; the monarchy was passed down from father to son. In the course of Urartian history, two unusual cases occurred. One involved the co-regency of Išpuini and his son Menua. Išpuini during his own lifetime declared his son successor and co-regent, judging from the inscriptions of Išpuini. The second was an unexpected and unclear situation where a person who seems to have been a crown prince named Inušpua was mentioned in some inscriptions along with his father Menua and his grandfather Išpuini. It is understood that Inušpua never sat on the throne, but was elected to be trained as king. We do not know the exact events or why he was never mentioned in the Urartian texts after Menua. V. Sevin dealt with this problematic subject, analysing all the evidence at hand and deducing that Inušpua fell victim to palace intrigue and was dismissed.<sup>14</sup>

I found the concluding chapter of the book (pp. 300–304) too succinct. For example, I would expect to read about the impact economic matters had on the social structure of the kingdom and vice versa. More graphic and diagrammatic presentations of results would have been of benefit in understanding the overall progress of the kingdom.

The author has included an appendix (pp. 305–309) on the kingship of Rusa son of Erimena and Rusa son of Argišti. He proposes an order of the king list of Urartu, suggesting that Rusa son of Erimena must have reigned before Rusa son of Argišti. This suggestion is opposite to the classical assumption that Rusa son of Argišti was Rusa II, meaning that Rusa son of Erimena should be Rusa II and Rusa son of Argišti should be Rusa III. Çifçi was justified in including this section in the volume, but it concerned me that he presents only one perspective and does not mention the alternative suggestions of, for example, Çilingiroğlu and Salvini.<sup>15</sup>

<sup>9</sup> Çilingiroğlu 1983a.

<sup>10</sup> Konakçı and Baştürk 2009.

<sup>11</sup> Gökçe, Işık and Değirmencioğlu 2013.

<sup>12</sup> Batmaz 2012.

<sup>13</sup> Çilingiroğlu 1983b; Konakçı 2009.

<sup>14</sup> Sevin 1981.

<sup>15</sup> Çilingiroğlu 2008; Salvini 2007a, 2007b, 2008.

To conclude, Çifçi is largely a synthesiser of the work of other writers, yet it is clear that this is a painstaking work. Overall, the book is a great success and will be of interest to students and academics interested in past economic resources of eastern Anatolia, as well as Urartian social organisation. I was well satisfied with the maps and tables, which greatly assist in illustrating the main ideas in the text. The weakest point of the book is that the bibliography is deficient in terms of other relevant studies, some of which are cited in this review. This stems from a stance against and disregarding some very significant ideas and evaluations by non-western writers in particular. This situation leads to sometimes (for example, in regard to the issue of Rusa II or III) inadequately defining problems, affecting the solutions in turn, and representing only one way of thinking.

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G. Clarke, H. Jackson, C. E. V. Nixon, J. Tidmarsh, K. Wesselingh with L. Cougle-Jose, *Jebel Khalid on the Euphrates, Volume Five: Report on the Excavations 2000–2010*. Mediterranean Archaeological Supplement 10. Sydney: Meditarch, 2016. Pp. xii+446, illustrations. ISBN 9780958026574 (Hardcover).

The fifth volume in the series of the reports on the excavations of *Jebel Khalid on the Euphrates* brings forward the full results of the seasons of excavations carried out by the Australian mission throughout 2000–2010, mostly in areas where the excavators failed to complete their work due to political circumstances. Hence this ‘final report’ is in a sense an ‘interim report’ that provides updated summaries on many of the categories of finds recovered at the site.

The fortified mound is a large site of some 50 ha, situated on one of the crossing-points of the upper Euphrates, with a walled acropolis on its narrower southern part and residential areas on its northern, wider part. A new Seleucid foundation (Amphipolis?) of the early third century BCE was probably established in the context of the aftermath of the Battle of Ipsos (301 BCE), in the days of either Seleucus I or Antiochus I, in order to consolidate Seleucid control over one of the areas of the empire’s western extremity in northern Syria. The importance of the site lies in its Hellenistic contexts: two major phases of occupation, the one, phase A, dated c. 280s/250s–150s BCE and the other, phase B, c. 150s–70s BCE. Its significance is enhanced by the fact it was not heavily disturbed by post-Hellenistic architectural occupation like many other Hellenistic sites in the Levant.

The volume has 13 chapters that are divided between two parts. Part one is concerned with the areas of excavation: Area A (acropolis), Area B (temple), Area C (palaestra) and Area S (commercial). Part two is an update on selected finds: sculpture fragments (from the temple); coins, figurine fragments (supplementing the finds of volume two), and fine wares (supplementing the finds of volume three) from across the entire site; stucco fragments (from the acropolis palace); as well as faunal remains from the 2006–2010 seasons, and lamps from 1987 to 2010 (that is, from all seasons carried out at the site, supplementing the finds of volume one). The last chapter is a synopsis (‘brief overview’) of the site in its historical and archaeological setting — a most welcome addition from three decades of research, as is the site bibliography (2000–2015), included in the volume’s first pages.



The overall impression, from all the chapters, is of meticulous treatment of the many types of finds, and very good familiarity with comparanda from many sites in the eastern Mediterranean. There is also a good level of editing, with somewhat consistent appearance of the structure of the chapters and their system of bibliographical reference (with the exception of Chapter 11, which is formatted slightly differently). My few concerns relate to some overlooked comparanda in some of the chapters that could have targeted better the less-focused idea of a western Seleucid empire in context. For example, one of the major contributions of Chapters 2 and 3 (the temple of Area B and the palaestra of Area C) is the uncovering of decorative architectural items of the Doric order (of either the amphiprostyle temple or the palaestra), which are remarkably similar to many of the Doric items recovered from contemporaneous Hellenistic Palestine.<sup>1</sup> The discussion of the commercial area in Area S (Chapter 4) seems to be largely based on a Greek architectural concept, but the layout of two central courtyards surrounded by rows of rooms is rooted in Near Eastern architecture and common at many Levantine sites of the period. Many of these were scenes of commercial activities, based on finds retrieved from them.<sup>2</sup> The fragments of sculptures, divided between items of Parian marble carved in Classical/Greek style and local, limestone items of a more eastern style, show artistic trends known elsewhere in the Near East.<sup>3</sup> The stucco chapter (11) would have benefitted from other Seleucid comparanda (as summarised by Rozenberger<sup>4</sup>).

Other than that, the coins and stamped amphora (mostly Rhodian) handles provide absolute chronological evidence for the site's occupation in the third–first centuries BCE, while the figurines offer a glimpse of the popular beliefs of the site's Hellenistic inhabitants, which combined eastern- and western-styled deities. The inhabitants' dietary habits, based on the animal bones, are of special significance given the relative paucity of meaningful assemblages of secure Hellenistic date in the Levant. A possible ethnic difference between the inhabitants of the acropolis and those of the lower town (on the basis of the animals consumed) is intriguing. But the conclusion of “a more culturally Greek diet” (p. 297), should be contested by the previously published locally produced wares, which show a predominance of Levantine-styled cooking vessels. This may well attest to the ethnicity of the site inhabitants, who were probably mostly locals. With the near absence of archaeozoological studies from earlier and contemporaneous sites in the region, tagging the meat diet as either Greek, Hellenistic or Levantine seems arbitrary.

All in all, the volume's contents supplement our knowledge on the Seleucid foundation of Jebel Khalid on the Euphrates, and together with its four predecessors (Volume One [2002] — Report on Excavations 1986–1996; Volume Two [2006] — Terracotta Figurines; Volume Three [2011] — Pottery; and Volume Four [2014] — Housing Insula), it provides the most in-depth archaeological analysis of a Seleucid-period site founded anew in the Near East. The archaeological community should be thankful to the excavators (aka the Australian mission) for putting at our disposal their results in fine quality and in relative rapidity.

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<sup>2</sup> See, for example, Magen 2009; Greenberg *et al.* 2017.

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Troels Myrup Kristensen and Wiebke Friese (eds), *Excavating Pilgrimage: Archaeological Approaches to Sacred Travel and Movement in the Ancient World*. Routledge Studies in Pilgrimage, Religious Travel and Tourism. Routledge: London and New York, 2017. Pp. i–xiii, 1–291. ISBN 9781472453907.

According to Christopher Hawkes' renowned 'ladder of inference', which ranked the difficulty of inferring prehistoric human behaviour from archaeological phenomena, "to infer to the religious institutions and spiritual life ... is the hardest inference of all."<sup>1</sup> In view of this, the prospect of 'excavating pilgrimage' appears as tantalising as it does enticing. Even where texts are available to aid interpretation, there are many hurdles in terms of definition, recognition and interpretation; opinion differs over what constitutes pilgrimage and what counts as its material traces.

In this collection of well-crafted papers, pilgrimage comes across as a practice that is at once universal and culturally specific. Understandably for a multi-authored volume whose scope covers multiple regions and a timespan of more than a millennium, the editors advocate for "a more flexible approach that sees pilgrimage as consisting of a set of practices that can be configured in different ways and may be emphasized differently in different historical contexts." The 13 case studies that form the main content are arranged in chronological order, opening with Joy McCorriston's account of nomadic ritual in prehistoric Arabia. Thereafter, the chapters address Classical Greek, Hellenistic, Roman and Early Byzantine subjects with a date range of approximately 500 BC–AD 500. The geographical coverage privileges the eastern Mediterranean, especially Greece and Anatolia, as well as Egypt, Syria and Palestine, and there is one chapter each on Roman Italy and Gaul. The book concludes with two 'responses' by Jaś Elsner and Jan Bremmer.

Two questions hover over all the contributions: how is pilgrimage defined? And how is pilgrimage visible archaeologically? These are addressed both explicitly and implicitly. Listing catch-all criteria that apply cross-culturally appears rather futile. The plurality of meanings that emerge from discussion of practices as varied as ritual feasting, tending the graves of ancestors and ceremonial initiation, as well as participation in early Christian saint cults, show pilgrimage to be broadly understood yet historically contingent. In this regard, Elsner suggests, quite radically, that pilgrimage may be viewed as a *post hoc* descriptor, "a fiction that makes sense of the past."

Presented with varied examples of ritual travel in its different guises, the reader can decide for herself whether to opt for a multi-faceted or more general definition. Yet, as Martin Grünewald notes, even a seemingly straightforward description ("a journey made with the purpose of reaching a sacred destination") becomes clouded when considering the motives, origin, identity and status of the individual pilgrim. Here

<sup>1</sup> Hawkes 1954, p. 162.

lies a tension between the individual and the collective. We all undertake personal pilgrimages to local and more distant destinations – remembrances, significant and sentimental journeys, revisiting sites from our own biography – but whether they can truly be called pilgrimage is debatable and whether they would be identifiable archaeologically even more so. The archaeological challenge is in seeking an objective and material identification of a subjective and intangible act.

The title's reference to 'excavating' is meant in a figurative as much as a literal sense. Although excavated evidence is presented, many insights come from observation of above-ground features and environmental settings, also incorporating information from historical texts and, to a lesser extent, artefacts. Troels Myrup Kristensen's chapter on Meriamlik, the cult centre of St Thecla in southern Anatolia, is a broadly conceived 'excavation', drawing on hagiographic texts in tandem with the physical remains of the sanctuary complex to argue for the operation of a "sacred economy" which encompassed patterns of movement, places of economic exchange and accommodation facilities.

The archaeological visibility of pilgrimage varies. Even for sanctuaries such as Meriamlik, well attested in written sources, associated features can rarely be proven beyond doubt as having been used by pilgrims. Texts offer some verification and can support interpretation, which is effectively done in several of the contributions, but more often they provide nuance rather than certitude. Vlastimil Drbal's study of the nature of worship at Mamre in Palestine shows how even the location of a site documented in historical texts can be a matter of debate. Yet, Drbal has ambitions beyond locating the shrine, as he seeks to elucidate the co-presence of pagan, Jewish and Christian worshippers, concluding that Mamre was likely to have had a syncretistic rather than a multi-religious character.

The interplay of text and material culture informs not only the *mise-en-scène* of pilgrimage cults but also their nature. Where written sources are foregrounded, for example, the Hellenistic votive inscriptions presented by Alexia Petsalis-Diomidis or documents for the life and cult of the Egyptian abbot St Shenoute discussed by Louise Blanke, both challenges and opportunities arise. Official texts often underline the formality of pilgrimage. Inge Nielsen's account of Greek pilgrimage to the mystery cults at Eleusis, Thebes and Andania specifies particular rites, movements and participants governed by codes and prohibitions, an elite activity, open to those who had the means to pay. On the other hand, the sacred context may have dissolved certain social mores, such as the division of space according to gender, as examined by Wiebke Friese in the context of women's sacred travel in Greece. Here, the starting point is Xenophon's assertion of a gendered division between indoors and outdoors, but the case for sanctuary visits as softening strict social conventions is argued on the basis of architecture rather than text.

Interpreting historical texts in relation to the material evidence is complex, and it is gratifying to see here that texts are not simply read as signposts for identifying archaeological features. Texts do not provide certainty as to the nature of pilgrimage cults as they changed through time; the palimpsest of material remains are often a better guide to their diachronic development. Archaeologists are in a privileged position to examine the shifting topography of pilgrimage. Often augmentation of the built environment appears designed to play on particular senses, such as the long and tapering roadways – "passageway architecture" – enclosed by buildings and crossed by archways that form portals to late antique shrines such as Abu Mina and Qal'at Sem'an (Ann Marie Yasin).

As well as being a collective performance, pilgrimage is enacted and experienced subjectively. Individual pilgrims and their journeys are identified by Grünewald, using epigraphic evidence for the origins of visitors to Roman healing springs in Gaul, and by Kristensen, citing references in hagiographic texts to the mostly local visitors to Meriamlik. Some of the most vivid insights in this book come through a phenomenological perspective that foregrounds the bodily and sensory experience of pilgrims as they passed across particular terrain, through designated stations, along processional ways and towards sanctified locations. While there is a degree of imaginative licence to these accounts, they are guided by the material evidence and are wholly justified. For instance, Kristoph Jürgens evokes the experience of visitors approaching the *temenos* structure at Magnesia-on-Meander in western Anatolia whose view of the temple was revealed to them gradually, at first obscured by smoke from the sacrificial fire, a revelation that involved sight, smell and perhaps the faint sting of smoke in the eyes.

Two of the most successful deployments of the phenomenological angle are the chapters on Samothrace by Bonna Wescoat and on Abu Mina by Heather Hunter-Crawley. Initiation at the Sanctuary of the Great Gods on the north Aegean island of Samothrace is reconstructed by considering “the physical environment and the bodily actions and perceptions of pilgrims moving through the environment.” Passage across the rugged terrain, moving between a series of focal areas, was vital to the heightened spiritual and emotional experience of initiation as “the nexus of buildings, monuments and passageways worked in close concert to shape the pilgrim’s physical and perceptual experience at the threshold of the *temenos*.”

Addressing Abu Mina, the cult centre of St Menas in Egypt, Hunter-Crawley argues for mimesis in the pilgrim’s experiences, including the associations that clay flasks and their contents of sacred oil may have triggered. The cult’s material culture “encouraged a certain mimetic performance of the saint’s embodied practice.” At this and other late antique pilgrimage centres “the landscape and architecture controlled and directed the movements of pilgrims in ways which materialised and reinforced the meanings of the individual cults.” This specificity of cult shows through in several of the chapters, none more so than Saskia Stevens’ treatment of visiting ancestors in the extra-mural cemeteries of Roman cities. These visits, Stevens argues, were a form of local pilgrimage that involved many aspects of more conventionally accepted pilgrimage – mobility, social and civic identity, active exchange, temporal punctuation and performance. Yet, here, the destination was one of many thousands of similar tombs in the locality; the paths travelled and the actions performed were particular to the deceased and their families. Pilgrimage as an institutional and orchestrated practice dissolves into ritual movement at its most personal and subjective.

Investigating pilgrimage on an archaeological basis is both challenging and rewarding. There are clearly difficulties of definition and identification, however, the contributors to this volume deploy methods and theories that are well suited to their different subjects. Some chapters are more empirical, marshalling evidence in the form of architecture and inscriptions, whilst others have a greater interpretive emphasis, exploring the kinaesthetics of pilgrimage, but all bring new insights into sacred travel. The two closing responses are both critical in tone, but while Elsner’s is a constructive theoretical treatment, Bremmer’s is combative and confrontational, naming cases from the book that he does not believe count as pilgrimage and asserting that use of the term can bring about misunderstanding. Evidently this is a subject capable of arousing lively debate.

As for the book’s format, the chronological ordering of chapters is understandable at a practical level, and those that overlap in their subject matter lend themselves to being grouped together (Nielsen and Wescoat on mystery cults in Classical Greece; Yasin and Hunter-Crawley on late antique Syria and Egypt). However, there is not at all a sense of temporal sequence – that pilgrimage developing in a linear fashion during classical antiquity. Rather than teleological progress, the impression is of ritual movement being firmly situated in its historical context, often delineated by strict physical and social boundaries.

Even if the sceptical reader is left feeling that pilgrimage is merely a convenient interpretive framework, there is real value in such a framework. Reconstructing people’s movements and senses as they relate to landscapes and material culture is an especially promising direction for further research. We have come a long way since Hawkes proclaimed spiritual life to be the most elusive archaeologically. Arguably we no longer go about archaeological inference under the same terms. The challenge remains, but the quest for definitive identification is widely held to be a mirage. It is from the coalescing of multiple, connected acts that pilgrimage can be identified as a materially distinctive phenomenon. This book makes an important contribution to assembling and interpreting evidence for these individual and collective practices.

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Tony J. Wilkinson, Edgar Peltenburg and Eleanor Barbanes Wilkinson (eds), *Carchemish In Context: The Land of Carchemish Project, 2006–2010*. British Association for Near Eastern Archaeology (BANEA); Themes from the Ancient Near East BANEA Publication Series, Vol. 4. Oxford: Oxbow Books, 2016. Pp. 238. ISBN 9781785701115 (Hardcover).

This book is dedicated to Tony Wilkinson, Professor of Archaeology at Durham University from 2006 to 2014. The Land of Carchemish Project (LCP) was the last regional survey he conducted, and this volume was one of the last that he brought to completion. The tribute at the beginning of the book mentions that “Tony’s vision, hard work, and expertise shaped the entire project, and every field season benefitted from his steady guidance, boundless enthusiasm and inclusive humour.”

The monograph contains 11 Chapters and a Site Gazetteer (Appendix A). It is handsomely illustrated with both black and white and colour figures (maps, plans, photos, drawings, etc.) and accompanied by numerous tables and graphs, which together significantly enhance the findings presented in this volume dedicated to an important strategic region of the ancient Near East. For this reader, at least, I found the illustrative material particularly useful; for example, The Land of Carchemish, the focus of this study, is clearly marked on Figs 3.1 and 3.2.

At the end of each chapter is a bibliography which includes the most relevant and recent scholarship on the areas and topics discussed. On the different spellings of Carchemish, it is noted, “Carchemish... is used throughout most of the chapters in this volume,” despite the fact that “epigraphic convention tends to prefer Karkamish or Turkish usage Karkemish” (p. 7). The layout of the volume is logical, with key themes carrying across individual chapters. The text is informative and enjoyable to read without being overly detailed or technical.

In Chapter 1 (pp. 1–21), the Introduction, by T.J. Wilkinson and E. Peltenburg, the authors note, “Carchemish can be regarded as one of the iconic sites in the Middle East, a mound complex known both for its own intrinsic qualities as the seat of later Hittite power and Neo-Hittite kings, but also because its history of excavations included well known historical figures such as Leonard Woolley and T.E. Lawrence” (p. 1). The topography of Carchemish includes three major components: a citadel mound or ‘acropolis’, an attached and ramparted Inner Town, and beyond it, the Outer Town. However,

because of its location within the military zone of the Turkish-Syrian border the site itself has been inaccessible to archaeologists for more than 90 years since the cessation of the British Museum’s excavations there in 1920. What is less well known is that some 40% of the total site area remains within Syria, in the form of the Iron Age ‘Outer Town’ as defined and mapped by P.L.O. Guy with Sir Leonard Woolley in 1920 (p. 1).

Wilkinson and Peltenburg state that the aim of *Carchemish in Context* is to present the results of regional investigations conducted within the Land of Carchemish Project in Syria and other archaeological surveys in the region. In Chapter 1, the authors examine descriptions and commentary made by early archaeologists and travellers concerning the site, the surrounding landscape, and the broader geographical context. As they note, “the Euphrates valley has, throughout history, held strategic value, both as a border and as a corridor of communication” (p. 2).

Investigations by the Land of Carchemish Project were undertaken between the spring of 2006 and July 2010. The programme’s origin lies in the excavations at Tell Jerablus Tahtani conducted by Edgar Peltenburg from 1992 to 2004. Although the LCP was intended to be more intensive, ultimately it fell short of this goal because of the growth of civil unrest in Syria after 2011.

Chapter 2 (pp. 9–21), titled “Sketch history of Karkamish in the earlier Iron Age (I–II B),” provides a summary and synthesis of the history of Carchemish by J.D. Hawkins and Mark Weeden, beginning with the period in which it was the seat of the Hittite viceroy in Syria and ending with the termination of Neo-Assyrian occupation, when the textual references for the site diminish.

This chapter is organised chronologically, outlining key historical developments by period: 12th century; 11th century; 10th century; 9th century; Late 9th to 8th century and 717 to 605 BC. It is noted, “The prime

location of Karkamish for trade and its historical political importance ensured that it remained a regionally defining city in northern Syria throughout the earlier Iron Age, with a possible although undemonstrated decline during the 11th century BC." The authors continue, "It functioned not only as a wealthy trade hub, but was also seen as the ancestral seat of Hittite power in the region, an association which clearly had an enduring ideological appeal" (p. 17).

In Chapter 3 (pp. 22–73), the volume continues with a regional overview of the land of Carchemish as it is defined by archaeological features and key historical references through to the early Iron Age. This chapter is titled "The Land of Carchemish and its neighbours during the Neo-Hittite period (c. 1190–717 BC)," and is written by Michael Brown and Stefan L. Smith.

Brown and Smith attempt to define the nature and extent of Carchemish's jurisdiction, and how it changed over time, using archaeological features in association with historical reference points to define areas that lay within the land of Carchemish and its neighbours during the Neo-Hittite period. It is stated, "Emphasis is placed... on the wider landscape context in which overlapping spheres of Neo-Hittite, Assyrian and Aramaean territoriality developed" (p. 22). The chapter covers topics that include: Historical sources for the land of Carchemish; Archaeological sites in their topographical context; Lands beyond Carchemish; Reconstructing patterns of settlement; and Concepts of territoriality. The review of archaeological and textual sources suggests five distinct phases in the development of the Neo-Hittite land of Carchemish in relation to its neighbours:

- Phase 1 (c. 1190–1100 BC)
- Phase 2 (c. 1100–870 BC)
- Phase 3 (c. 870–855 BC)
- Phase 4 (c. 855–717 BC)
- Phase 5 (717 BC +)

A key finding to emerge from the historical sequence is that it defines a geopolitical territory, which both overlaps with and is distinct from contemporary settlement landscapes known from archaeological survey.

Chapter 4 (pp. 38–67), "Long-term settlement trends in the Bircecik-Carchemish Sector," by Dan Lawrence and Andrea Ricci, discusses the major results from the Land of Carchemish Project, providing an overview of the main trends of settlement in the region over some 8000 years. The focus of this chapter is upon the earlier phases of settlement, from the Neolithic until the end of the Bronze Age (LBA), when Carchemish became an outpost of the Hittite empire.

Lawrence and Ricci "[make] use of remote sensing techniques, published excavation and survey reports and recent archaeological survey undertaken as part of the Land of Carchemish Project to reconstruct settlement and landscape trajectories to the north and south of Carchemish, across the modern border between Turkey and Syria" (p. 38). The findings of Chapter 4 are grouped under the following headings: Data sources and methods; The physical environment; The archaeological landscape; Discussion: structural transformations and urban development in the long term; and Conclusion: Carchemish in context.

The authors of Chapter 4 record that "the longevity of occupation at Carchemish and its prolonged period as a significant urban centre place it in a very small group of sites within the Northern Fertile Crescent" (p. 63). According to Lawrence and Ricci, "most of the sites which grew rapidly during the second urban revolution of the Middle and Late EBA declined similarly rapidly after only a few hundred years, whilst only Aleppo and perhaps Hama ... and Samsat ... continued to be important regional centres into the Iron Age and Classical periods" (p. 64).

One important conclusion made by Lawrence and Ricci is that Carchemish's position "at the nexus of both north-south and east-west trade and exchange networks must be considered integral" in explaining the site's success in the long term (p. 64). The Euphrates River was a key conduit for the movement of people and goods which Carchemish was in a prime position to exploit and control. The authors also stress that the local landscape played a part, with the agricultural potential of the fertile plains combined with opportunities for grazing in the surrounding area.

The regional perspective on settlement continues in Chapter 5 (pp. 68–105) by T.J. Wilkinson. His paper on "The landscapes of Carchemish" begins with a discussion of the physical and cultural landscapes of the Land of Carchemish Project. The Classical and later landscapes are also discussed.



Wilkinson reports that he intends “first to provide a summary of the physical landscape, and second to outline the range of evidence for the landscapes of the later periods (roughly post-Late Bronze Age)” (p. 68). He systematically reviews the evidence for the physical environment, the Iron Age landscape, Post-Assyrian landscapes, and the last thousand years, and finishes with an overview and discussion of these different periods.

According to Wilkinson, “Crucial to estimating the period of occupation of the sites is the dating of surface pottery,” and he notes that, in this regard, the “Neo-Assyrian forms occurring in the 7th century levels at Tell Ahmar are particularly useful” (p. 79).

In summing up, Wilkinson contends that “when the Land of Carchemish is viewed from the perspective of the communities that occupied the area, it would appear that, away from Carchemish itself, the landscape was dominated by small nucleated strongholds, which not only continued for long periods of history, but [were] also probably occupied by long-lived communities that possessed a strong local identity” (p. 102). A key observation to emerge from the Land of Carchemish survey area is that “local communities appear to have continued throughout the Iron Age and even into the Hellenistic-Roman era.” Wilkinson also notes that “local identities... persisted, an interpretation which is reinforced by the presence of local Iron Age ceramic types, which continued and were somewhat different from those to the east of the Euphrates” (p. 102).

Chapter 6 (pp. 106–116), is described as the first of a series of more focused chapters which explore site-specific aspects of the regional archaeology. In this chapter, titled “The scent of empires on the Sajur,” Jesper Eidem draws particular attention to a series of important sites along the southern boundary of the survey area, on the Sajur River, some of which were positioned along the main campaign routes of the Assyrian kings.

In his discussion, Eidem considers the Danish investigations at the sites of Aushariye and Qala’at Halwanji, and imperial imposition on the Sajur Valley, in light of three scenarios: Assyrian “west expansion”, Middle Bronze Age forts on the valley, and a peculiar topographical feature of perhaps Early Bronze Age IV date. Eidem proposes that “intermediate phases between material remains and the ephemeral, often ideologically charged, historical record, remain difficult to reconstruct in this marginal context” (p. 115).

In Chapter 7 (pp. 117–131), on “Carchemish in the 3rd millennium: a view from neighbouring Tell Jerablus Tahtani,” Edgar Peltenburg discusses the close relationship between the Early Bronze Age (EBA) site of Jerablus Tahtani and Carchemish, located some 3 km to its north. He notes that of the issues in the history of Carchemish, “one of the most contentious is the timing of the growth of the site to its *c.* 44 ha size, and the relationship of probable urbanization to its emergence as a major political and economic centre.” Whilst “current excavations will hopefully provide much needed stratified and well-dated evidence on these earlier periods of [Carchemish’s] history,” Peltenburg states, “the neighbouring site of Jerablus Tahtani furnishes us with indirect clues to early developments.” (p. 117).

This chapter focuses on the implications of discoveries at Jerablus Tahtani (known to Woolley as Tell Alawiyyeh) for our knowledge of 3rd millennium Carchemish. Peltenburg observes that “developments at Jerablus Tahtani and Carchemish in the 3rd millennium were closely intertwined because of the proximity of the two sites, with no intervening physical barriers” (p. 128).

Chapter 8 (pp. 132–183), by Eleanor Barbanes Wilkinson and Andrea Ricci, summarises the results from the Carchemish Outer Town survey conducted in 2009 and 2010.

The authors state “the primary objectives of the Carchemish Outer Town Project were essentially threefold: to reassess the published record of the Outer Town of Carchemish through the application of remote sensing and intensive survey; to delineate the visible limits of the ancient Outer Town while documenting any unpublished remains of ancient occupation and topographic features that might indicate earlier structures; and to identify the archaeological features at greatest risk from modern development.” A key aim was to “assist the DGAM [Directorate General of Antiquities and Museums in Syria] in the long-term conservation and management of the site and aid in addressing imminent threats from new building, utilities and industrial works, agriculture, and other potentially damaging development” (p. 134).

As summarised in the introduction to the volume, the campaigns (in 2009 and 2010) which took place in the 40-ha outer town, “provide important new data sources regarding the layout, defences and dates of occupation of this significant part of the city as well as a reassessment of the original town plan produced by C.L. Woolley and P.L.O. Guy in 1920” (p. 7).

This chapter (8), one of the longest in the book, includes a good selection of images, tables, photos, graphs, plans and drawings (of diagnostic pottery), documenting the work of the Outer Town survey.

The latest phases to be discussed, namely the periods of the Classical, Roman, Byzantine and Early Islamic occupations, are presented by Paul Newson in Chapter 9 (pp. 184–202). Newson observes that “the site of Carchemish was undoubtedly a key urban centre for the Graeco-Roman period within the Upper Middle Euphrates region. Although it was always a relatively minor urban centre as far as it related to the rest of the Near East, during this period it served as the dominant urban site within the section of the Middle Euphrates designated as the Carchemish-Birecik enclave” (p. 186).

Key findings of this chapter include: “for the Graeco-Roman period the town of Carchemish performed a number of functions which changed over time. From what is known of the history of Carchemish it appears the settlement regained some importance in the wake of the conquest of Achaemenid Persia by Alexander the Great... [and] following the death of Alexander with the establishment of the successor Macedonian controlled kingdom of the Seleukid Empire, of which this region formed a strategically important part” (p. 187).

According to Newson, “the Hellenistic period marks a turning point in the settlement history of the region with the arrival of Greek-speaking populations within Macedonian and Seleukid colonies established at Carchemish and elsewhere in the upper Middle Euphrates region... Macedonian and other Greek colonists created new socio-economic links beyond, from the Mediterranean to Central Asia.” Newson believes these changes resulted in “modifications in culture and trade... manifested in the increasing diversity of settlement types and pottery assemblages,” during the Hellenistic period, which “also marks the beginning of the resurgence of Carchemish (*Europos*) as a regional centre” (p. 199).

In the Roman to Byzantine period, Newson notes “the broadening of settlement types, and also the distribution of new settlement” in some areas, “reflect[ing] a continuance and growth of practices introduced in the Hellenistic along with several additional issues and processes” (p. 199).

In Chapter 10 (pp. 203–214) Emma Cunliffe reports on 60 years of site damage in the Carchemish region. Her findings reveal that the project “found a near-continuous spread of ancient settlement, which today is being damaged at an alarming rate” (p. 203). She continues,

Whilst natural taphonomic changes have affected the condition of the sites, the area remained largely unchanged until the Tishrin Dam flooded large areas in the 1990s. No planned irrigation works were implemented but the new water level generated rapid expansions in agriculture, settlement, and the urban infrastructure required to support them, with a corresponding impact on the sites. Using Project data and comparative sequential satellite imagery from the 1960s to 2009, it is possible to study the changes on the sites. The results indicate the damage is not only still occurring, but is increasing in impact (p. 203).

For Cunliffe, “arable agriculture is the most common threat, affecting almost all sites: it is a slow, serious, on-going problem” (p. 213). She suggests that “the arable expansion has led to a rise in related problems – looting, bulldozing, and roads and tractor tracks” (p. 214). Tragically, the types of damage discussed in Cunliffe’s paper have now been overtaken by damage arising from the Syrian civil war, as seen at Carchemish and elsewhere. She concludes her paper with a series of recommendations which respond to longer-term issues facing the archaeological resource.

The final chapter, Chapter 11 (pp. 215–225), by Tony Wilkinson and Edgar Peltenburg, concludes with the main results of the LCP campaigns and how they illuminate the historical context of Carchemish. In the introduction to the volume it was posited, in a measured assessment, that “although the project may be seen as representing many sites and periods, it was also based upon a significant degree of inter-disciplinary research which crossed many chronological, academic and geographical boundaries... bring[ing] out insights

and connections” (p. 7). A key finding in the conclusion is that “the results from the Land of Carchemish surveys and the Carchemish Outer Town Project demonstrate that the results are to some degree coherent, and can be interpreted in terms of long-term historical processes” (p. 223).

Lastly, a site gazetteer by T.J. Wilkinson, D. Lawrence and A. Ricci is included at the end of the volume (Appendix A, pp. 226–238), summarising the basic details of the sites (LCP 1–80) recorded by the Land of Carchemish Project, Syria, 2006–2010.

In summing up, this is an important monograph, for it goes some way in fulfilling its stated aim, which is to present the results of regional investigations conducted within the Land of Carchemish Project in Syria and other archaeological surveys in the region.

Undoubtedly, Carchemish is one of the great capitals of the ancient Near East, but it has been inaccessible to archaeologists for many years. With this situation in mind, and as the authors of Chapter 8 state,

The site of Carchemish is by far the largest and best known site within the Land of Carchemish Project survey area. Being situated directly on the modern border between Turkey and Syria, Carchemish occupies a peculiar position geographically and politically. Systematic archaeological excavation of the site was prohibited in both countries from 1920 until the Land of Carchemish Project obtained permission to initiate a programme of archaeological survey on the Syrian side in 2009. On the Turkish side, the site has been the focus of renewed archaeological investigations since 2011. Under the direction of Nicolò Marchetti with Hasan Peker, many of the previously excavated areas are being re-examined and an extensive conservation and preservation plan is currently being implemented within the site in Turkey (p. 132).

I was fortunate to visit the team undertaking the LCP in Syria and recall meeting Professor Tony Wilkinson on-site at Jerablus Tahtani in 2009. On that occasion his “steady guidance, boundless enthusiasm and inclusive humour” were clearly conspicuous. This volume, dedicated to Tony, is a fitting tribute to a much-admired Near Eastern archaeologist and specialist in the landscape archaeology. *Carchemish in Context* presents the findings of the Land of Carchemish Project, conducted between 2006 and 2010. The archaeological survey of the outer town of the city, as well as some 500km of its hinterland, was the first to apply remote sensing techniques in the region, and this research therefore breaks new ground in that regard. *Carchemish in Context* will be of interest not just to specialists—Hittitologists, Assyriologists, Near Eastern and landscape archaeologists—but to anyone with an interest in the archaeology of the ancient Near East, as well as the wider heritage community and cultural resource managers.

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